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Modern beekeeping

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The
Beekeepers
Item

JANUARY 1921

*MAKING BEEKEEPERS AT A. & M.
COLLEGES*

By *PROF. S. W. BILSING*

FACING HIVE ENTRANCES NORTH

By *LOUIS BIEDIGER*

IS HONEY A LUXURY?

By *DR. M. C. TANQUARY*

HONEY SELLING AND PRICES

By *DR. A. F. BONNEY*

MIGRATORY BEEKEEPING IN JAPAN

By *YASUO HIRATSUKA*

WHY WE SHOULD ORGANIZE

By *H. B. PARKS*

HONEY BEES IN SANTO DOMINGO

By *H. BRENNER*

REGULAR MONTHLY DEPARTMENTS

By *E. G. LESTOURGEON and ALMA M. HASSLBAUER*

LOUIS H. SCHOLL, Editor and Publisher

New Braunfels, Texas

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COMPLETE STOCK OF LEWIS BEEWARE, DADANT FOUNDATION, WOODMAN SMOKERS, MUTH VEILS, ALUMINUM HONEY COMBS.

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We work beeswax into Dadant Foundation at the following prices f. o. b. San Antonio, for prompt shipment:

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25-lb. Lots	38c	43c	47c	50c
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500-lb. Lots	30c	32c	35c	37c

BEES WAX

Cash price f. o. b. San Antonio, 25c; exchange price, 28c.

SHIP US ALL THE BEESWAX YOU CAN

Texas Honey Producers Association

Southwestern Distributors

San Antonio, Texas

ROOT QUALITY BEES AND QUEENS

We have one of the most modern and complete queen rearing equipments in the United States.

A limited number of orders accepted at the following prices:

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	Mar. to Oct.
Untested Queens -----	\$ 2.00
Select Untested -----	2.25
Tested -----	3.00
Select Tested -----	3.50
Tested breeding queen with 1 frame nucleus, May to October -----	10.00

NUCLEI

	March	April to July	July to October
One-frame nucleus without queen -----	\$ 6.00	\$ 5.00	\$ 3.50
Two-frame nucleus without queen -----	8.50	7.25	5.50
Three-frame nucleus without queen -----	10.50	9.50	7.50
Five-frame nucleus without queen -----	15.00	13.00	10.50

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Bee Keepers' Supply Mfg. Plant.

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ALL BOXED, ready to ship at once—thousands of Hoffman Frames; also Jumbo and Shallow Frames of all kinds—100 and 200 in a box. Big stock of Sections and fine polished Dovetailed Hives and Supers. Send for a price list. I can save you money.

Will take your Beeswax in Trade at Highest Market Price.

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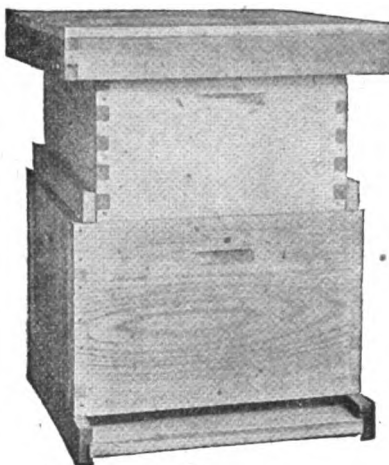
159 Cedar Lake Road

MINNEAPOLIS, MINN.

Modified Dadant Hive

Glance at this illustration to compare this hive with "Standard" Langstroth hive.

You get 40 per cent greater brood comb area than in the "Standard" ten frame Langstroth.



Your present brood equipment can be put above the Modified Dadant hive used as full depth supers.

Features are deep frames, large 1-story brood nest, frame space ventilation, excellence in wintering, swarming easily controlled.

Modified Dadant Hive Features.

1. Eleven frames, Langstroth length, Quinby depth.
2. Frames spaced $1\frac{1}{2}$ inches for swarm control.
3. Extracting frames $6\frac{1}{4}$ inches deep.
4. Dovetailed body, regular reversible bottom and metal roof cover with inner cover.
5. Langstroth "Standard" equipment easily used with this hive.

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DADANT & SONS, Hamilton, Ill

The Ault Bee Shipping Cage

1. It is a dark cage, much more so than the open screen cages we have been shipping in for years
2. The feeder uses pure sugar syrup, best feed known for bees while confined in cages.
3. These feeders are soldered all around instead of four places, the old way.
4. They have a screw cap that will not jar out like the friction cans.
5. Instead of a pin hole, I now use about one-half inch hole covered with a cotton duck waxed washer that the bees can suck the feed through. No danger of getting stopped up, no danger of getting hole too small or too large, several times as many bees can get to the feeder than the old way.



6. Our feeders are one-third larger than any we have ever used before.
7. The cage is one solid piece screen wire all around inside.
8. Thin boards on the outside strengthen the cage, cut the light and prevent the express men from jobbing holes in the screen.
9. The end boards are one solid piece, tough lumber which extends up and below the cage an inch.
10. This inch of space above and below gives plenty of ventilation, the hot air passing out of the top forming a draft like a chimney.
11. The cages are large and roomy based on years of experience of shipping.
12. I have overcome all the objections to the old shipping cages I have used in the past.

Prices F. O. B. shipping point quantity lots in flat, 1 pound size 55c; 2 pound size. 65c; 3 pound size, 75c. Free circular for the asking.

Booking orders now for Spring shipping for Bees and Queens.

- 1 pound pkg. \$3.00; 25 or more \$2.85 F. O. B. Shipping point by express.
- 2 " " \$5.00; 25 or more \$4.75 F. O. B. " " " "
- 3 " " \$7.00; 25 or more \$6.65 F. O. B. " " " "

Untested Queens \$2.00 each; 25 or more \$1.75 each
 Select Untested \$2.25 each; 25 or more \$2.00 each
 Tested Queen \$3.00 each; 25 or more \$2.70 each
 Select Tested \$3.50 each; 25 or more \$3.00 each

When ordering bees add price of queen wanted. FREE circular giving prices by Parcel Post, Nuclei, etc.

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Our 1921 Prices on Comb Foundation just Out

Made from Wax Furnished by Beekeepers

Lots of	100 lbs.	250 lbs.	500 lbs. or more
Medium Brood Foundation	25c	23c	20c
Light Brood	27c	25c	22c
Thin Super	30c	28c	25c
Extra Thin Super	32c	30c	27c

F. O. B. Los Angeles.

If you have not tried our Foundation send in your trial order at once. If you have no wax to be made into foundation get our prices on foundation. Also manufacture Bee Hives and parts of the finest quality. One order will convince you of their superiority. Full line of supplies carried at all times.

We also make all kinds of boxes and shipping crates.

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ORDER ROOT QUALITY BEE SUPPLIES FROM SAN ANTONIO, TEXAS

BECAUSE

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BECAUSE

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Our stock of ROOT QUALITY BEE SUPPLIES is the largest and most complete ever handled in Texas.

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THEREFORE

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THE A. I. ROOT COMPANY OF TEXAS

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San Antonio, Texas.

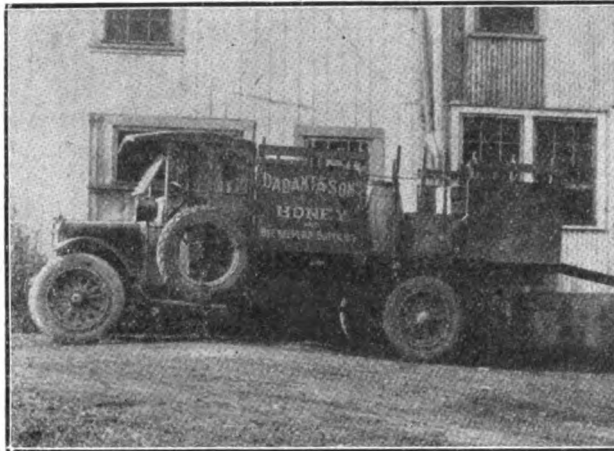
THE DADANT FOUNDATION FACTORY

requires many thousand pounds of beeswax to keep running full force. The accompanying photograph shows a truck load of beeswax being unloaded at the foundation factory.

There were shipments from 62 different parties, coming in by freight, express, parcel post and by boat.

So carefully checked, weighed and cared for are these that it is a rarity to have a lost shipment, a complaint of weights or dissatisfaction in any way. Some wish cash, some bee supplies but most want DADANT'S FOUNDATION.

The same care is used throughout the process of Dadant Foundation manufacture packing and shipping.



As much pains is taken to be correct and give satisfaction with a one pound lot as with a two ton shipment.

Satisfaction

Guaranteed

DADANT'S FOUNDATION is NOT the quick invention of a week's or a month's time.

BUT it is the evolution of years of time combined with the test of new methods variously tried and painstakingly improved; and the finished product put to a thorough test on a large scale.

Dadant's Foundation

Every inch, every pound, every ton equal to any sample we have ever sent out.

Specify it to your dealer. If he hasn't it write us.

DADANT & SONS

Hamilton, Illinois

Catalog and Prices on Bee Supplies, Beeswax, Wax Working into Comb Foundation and Comb Rendering for the Asking.

THE BEEKEEPERS ITEM

A SMALL ITEM IN ITSELF, A BIG ITEM FOR BEEKEEPERS.

Entered in the Postoffice at New Braunsfels, Texas, as Second-Class Matter.

Louis H. Scholl, Editor.

One Dollar Per Year

VOLUME 5

NEW BRAUNSFELS, TEXAS, APRIL, 1921

NUMBER 4.

Beekeeping Progress Made in Mexico

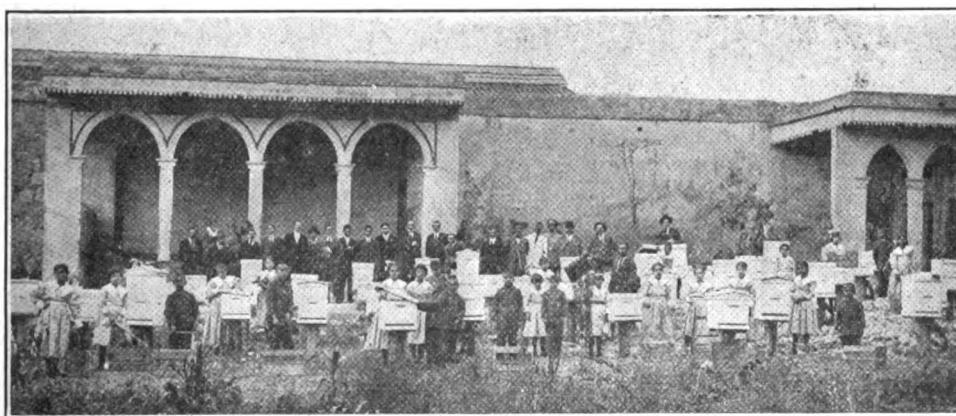
It Is Not Generally Known That Certain Parts of Mexico are Most Excellently Adapted to Beekeeping, and Much Less Acquainted are the Majority of Us With the Practical and Educational Progress Made.

H. B. Parks

A LONG, narrow river and an imaginary line divides the United States from Mexico. Along the north side of this line is Texas, New Mexico, Arizona and California, all noted for honey production. South of this line stretch out the fields of Mexico, covered by practically the same flora growing under almost the same conditions that exist in our States. Farther south one finds a land where winter is unknown and where under tropical conditions countless varieties of blossoms are open the year around. Here lies an enormous part of Mexico, almost unknown

is trying to make our Sister Republic a modern nation and who is as loyal to his flay as we are to Old Glory, is almost unknown or unappreciated by us. It is this class of Mexicans that are now seeking business alliance with us. Their representatives are visiting our market centers and manufacturers and asking for trade with us. It is our prejudices and not theirs that is holding us back from developing, in the land south of us a true friend and sister in our struggle for democracy.

Intensively interesting to us as beekeepers is



The Elementary Class in Apiculture and Equipment,
A. and M. College, Irapuato, Gto., Mexico.

and unvisited by our people. The most of us know only the Mexico of the movies and the comic section of the newspaper; a Mexico represented to us by the scattered bands of peon laborers imported to work on our railroads, cotton-fields and highways. The real Mexican that

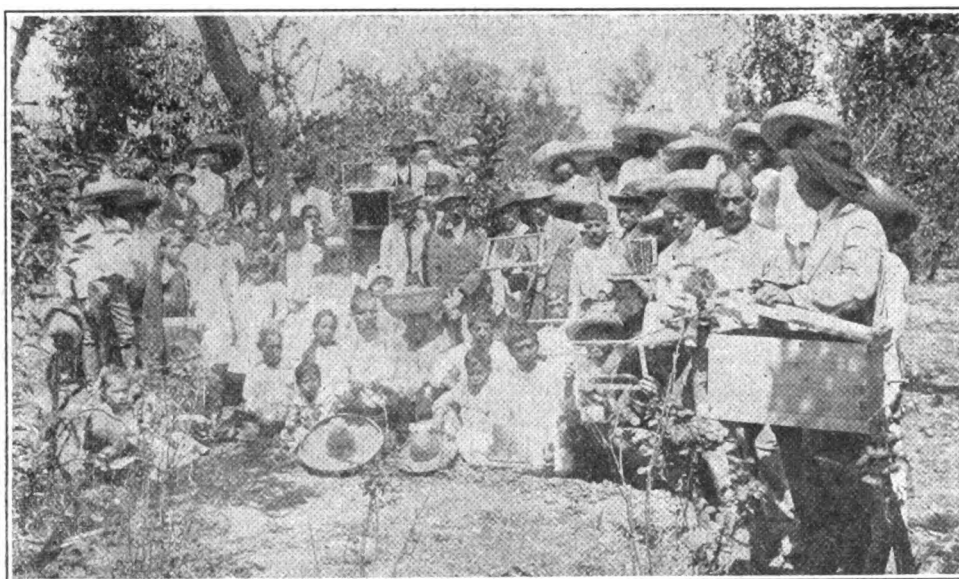
the fact that Mexico presents a field for apiculture seldom equalled. In fact some districts of Mexico seem the natural home of the honey-makers. Not only our honey bee is kept but also the stingless bee, the small bee that makes the one sided comb and black wax, and several other

varieties of honey gatherers, not to speak of the honey producing ant. Honey is as largely used in Mexico as with us and yet modern beekeeping and modern methods are almost unknown there. This latter fact is in great measure our own fault.

It is the common testimony of men who know, that the opportunities for the beekeeper in certain sections of Mexico are almost unlimited. Only last month a prominent citizen of Frio County Texas, purchased 10,000 acres of land in northern Mexico and is already making arrangements to put a large number of apiaries on this ranch. This gentleman has lived among the beekeepers all his life and knows a bee location when he sees one. He is merely typical of many others who

forts that are being made to popularize beekeeping and certainly show that it is being done successfully. We could well imitate this evidence of enthusiasm in our own short courses and extension work.

Mexico exports tons of honey at present, but much of it is low grade owing to the primitive methods of handling, but much high class honey is produced. The Texas Honey Producers Association has as members, P. Provensal, Manuel Vargas and Eugene Pinson, all prominent Mexican producers. L. H. Morrison, G. Stauffert and Wm. Foster are heavy buyers of American bee supplies. A bulletin on beekeeping written for the Mexican government by C. P. Dadant and



A Typical Mexican Beekeepers' Field Meet in an Apiary in Mexico.

are planning on the extension of American beekeeping in Mexico.

Mexico is not asleep on the beekeeping question. Little as we may suspect it, many government schools exist where agriculture is taught and in most of them apiculture as well. Extension courses in beekeeping and even Boys' and Girls' Bee Clubs testify to the work of these extension departments. Where in the United States could you find a Childrens' Bee Club like the one in the picture shown herewith, or a demonstration in transferring as shown in another one? Or where is an elementary school, teaching apiculture, with an equipment like that shown in the illustration?

These pictures were sent us by the governor of the State of Michoacan. They show the ef-

translated into Spanish by E. G. LeSturgeon, manager of the Texas Honey Producers Association, is widely distributed in that country. Mexico has also published for free distributon a hand book by Juan de Boer, a prominent Belgian authority. Mexico needs the help and support of the beekeepers of the United States. She needs good beekeepers and modern equipment. She needs affiliation with the American Honey Producers League. She needs these, not to enable her to sell honey on our market, but to help her develop the possibilities of her honey producing flora and to learn to sell her own honey on her own market.

She needs and deserves the confidence of our citizens so that her government can have our support in making Mexico a safe place for her

citizens and ours.. When she has this our salesmen will place modern beekeeping apparatus in every part of that country. Our beekeepers will be the leaders in apicultural development there as they settle in the unoccupied lands of Mexico. which in course of time they will certainly do.

Our sister republic is asking, yes, demanding a chance to buy our goods. She offers wonderful opportunites to beekeepers who will come into her borders. By the ties of the Monroe Doctrine, and by the various treaties of our nations, we are bound together. Let us as beekeepers

DIVISIBLE VS DEEP FRAME HIVES

W. S. JOHNSON

Reading over your article in *THE BEEKEEPERS ITEM* for March, in which you describe the famous Scholl divisible hive, there are absolutely no arguments left for the so-called large hive enthusiasts, though I have found that you have left out one or two arguments in favor of the divisible brood chambers that are worth discussing.

All beekeepers who kept bees long enough to learn their nature, which are exactly the same as



Boys' and Girls' Bee Club, Morelia, Mich., Mexico.—Note the "Bee Tree."

help to place beekeeping in Mexico upon its feet.
San Antonio, Texas.

Our old friend and former Texan, Wilmon Newell, has been chosen as Dean of the Florida College of Agriculture, Director of the Experiment Station and Director of the Extension Service. Mr. Newell is one of the leading Entomologists of America. It was while he was in charge of the Texas control work that our present foul brood law was passed and our system of apiary inspection developed.

that of human beings, only in a different form, will agree that to make bees comfortable and satisfied is essential if swarming is to be controlled and the largest returns are to be expected from them. Therefore we must solve this problem, and after studying the matter thoroughly and making several experiments, and trying several different methods, on how to control swarming, I came to the conclusion in the future to tolerate nothing but the divisible brood chambers. This also saves the trouble of using any queen excluders and many other unpleasant handling.

I winter all of my bees in two or three shallow extracting supers. Hence, as soon as they start to build well in the spring I add one super underneath. After the queen has started to lay well, and nectar is coming in, I add one between the original two supers of the brood chamber. This second operation must not be done early unless the colony is strong enough to cover both supers that has brood in them. As the brood emerges from the super the cells are filled with honey. Then, if necessary, I add another super under again. This keeps the bees constantly working downward, and this alone will keep many colonies from swarming.

Naturally, when the bees in an ordinary ten frame body have built to the bottom board, they see no further room in which to build, and before they realize that there is plenty of room above they will be ready to swarm. Then nothing can prevent them from swarming without seriously hindering their operation in the field.

I have tried several times to use three eight frame bodies, but I found that when I added the third deep super between the original two, the bees will begin to build queen cells in the upper story on account of the bees being too far apart. This is not the case with the shallow supers. With these they have free communication between the two divided parts of brood. Some of my colonies at the end of the honey flow have as many as eight shallow supers, and all of them are added at the bottom except one, which is the first one given in the early spring. This gives the bees the downward building and as they build down and spread their brood the upper hatches out and the honey is stored up in its place. Last year I had eight per cent of my colonies swarm, which I consider a very small percentage this far south.

Also when it comes to extracting the shallow supers they have the advantage over the deep ones. They are easily cleared of bees and lighter to handle. I would like to hear from some one who has tried the above described method of manipulation and with what success.

Alexandria, Louisiana.

The Country Gentleman, beginning with April 6th, is running a series of articles on each step in beekeeping. These articles are by Mr. Douglas Wallace, former Indiana State Apiary Inspector, and are designed to popularize beekeeping.

WHAT HONEY IS REALLY WORTH

LEONARD DEIMER

Honey is worth the price it will bring, be it a dollar a pound or nothing. We are living in a world of competition, competition for the means of life. Honey is the weapon of the beekeeper in this battle. And when honey falls in price while nearly everything else remains 200 to 400 per cent above the pre war level it means that the gasoline, lumber, clothing, bee supplies, railroad and other interests have beaten the beekeeper down. To say that honey is not worth 25 cents a pound is suicidal to the beekeeper.

By way of illustration, permit me to say that I have always wondered how certain animals first acquired the habit of meat eating. For it is plain that as there must have been grass before grass eating animals could live there must have been grass eaters before there could be meat eaters. I found a clue in a certain book in which the author describes how, during the grasshopper plague in Argentina, some grasshoppers ate their fellows who were in a helpless condition while changing their skins. Grass and leaves were gone so they ate their fellows who could not defend themselves. Nature is selfish and pitiless, and we are a part of nature, and subject to its laws. If we voluntarily make ourselves helpless or permit ourselves to be made so by, for instance stating that honey is selling for far too much, we put ourselves in the position of the mouse or rabbit in the animal kingdom—no one respects them, no one pities them.

Mr. Biediger in the preceding issue declares that the beekeeper who gets 25 cents a pound for his honey deserves hanging. But the high price of everything else compels many beekeepers to hire themselves out as laborers to keep from starving and to pay the interest on the mortgage.

Permit me to say that there is a just price for every product. This just price can be found through the cost of production and the living standard, which last I will put at ten dollars a day. There are in this richest land on earth tens upon tens of thousands of families whose income is much greater. Most beekeepers though make much less than that. But is there any beeman so mean and slavish in spirit who dares to say that every decent, honest, hardworking beekeeper should be less well off than the best to do people are?

It is estimated that the average honey surplus

per hive in the United States amounts, year by year, to 40 pounds a colony, and the average number a man can care for, with the help of his wife during extracting, is 400 colonies. This makes 16,000 lbs. of honey at 25 cents a pound, and amounts to \$2,400.00 for the year. A colony of bees in a modern hive, the broodnest and two big supers with drawn comb is worth more than ten dollars. The price a certain supply house asks for a colony of bees with one super is \$28.00. But figuring at only ten dollars the investment is \$4,000.00. At 7 percent interest and 5 per cent depreciation we have \$480.00 to subtract from those \$2,400.00 in order to find our net income. And the expense of truck and containers and other costs is not even included in this.

Honey could sell at a much higher price and yet the beekeeper would not be profiteering. Perhaps I don't know much about it, but as far as I can see the honey price was cut in order to sell the honey on hand. But it didn't work. The man who desires to eat honey expects to pay a good price for it, and the man who wants no honey will not buy it at 2 cents a pound. A demand for honey can be created by advertising only so as to reach those who want it. And then the price should be commensurate with the cost of production.

Chico, California.

BAD STORES CAUSE PARALYSIS

HENRY MAUER

That paralysis can prove very harmful to bees and cause the destruction of many colonies has been the sad experience of several bee-keepers in this locality. Last year I had seven colonies of bees, spring count, and I lost every one from paralysis. A neighbor of mine had 130 colonies of which he lost a hundred and from those remaining he did not harvest one pound of honey.

The trouble was caused, I think, by the bees getting the honey from frozen blossoms of the pear trees. This must have been unfit for their food and caused the paralysis. This would show that unsuitable food can cause the trouble and kill our bees.

El Paso, Texas.

American foulbrood is very severe in several counties of the state and will have a material effect on the quantity of honey produced this year in those localities.

MORE ABOUT HONEY ANTS

NEWTON G. LEGEAR

The reference to ant honey made on page 176 of the December number of THE BEEKEEPERS ITEM, to say the least, very interesting to me. I was in hopes that more might have appeared on the subject in subsequent issues. My own interest in the discussion prompts me to offer a little more information that has been gleaned from different sources.

Honey Ants Where Found

Honey ants have been described principally from Australia, South Africa and North America. The American species range over the dry plains and deserts from the City of Mexico to Denver Colorado.

As early as 1832, Mexican ants having enlarged and rounded abdomens filled with honey were reported from Old Mexico. Two species have been recognized, *Myrmecocystus melliger*, and *M. mexicanus*, with some eight sub-species and varieties (Wheeler). Capt. W. B. Flesson made, more or less erroneous, observations on the variety *horti deorum* at Santa Fe, N. M., (Edwards, 1873). Also Loew (1874), and Saunders (1875). But the first trustworthy observation of this variety was made in the Garden—of the—Gods, Cal., in 1879 by McCook. He found the openings or gates of their cities on the tops of rocky ridges which led down into a series of branching galleries, halls, and rooms in the rock beneath. These subterranean valleys or nests were of various sizes—the largest being eight feet long, three feet high and a foot and a half wide. And all this space being fairly honey-combed into branching galleries and chambers. From the ceilings of these vaulted chambers hung the honey bearers side by side, by means of their claws.

Wheeler's observations in 1903-6 in California on this variety of honey ants fully corroborated McCook's findings in nearly every particular. As is well known, ants and bees are very greedy after sweets, and it is not surprising to know that both have found a way to lay up their stores of food for present and future use. While honey bees store their treasure in self-made waxen combs, honey ants, as yet have not learned to manufacture any such receptacle, but instead, resort to storing such food within their own bodies. It seems that certain workers of these ants act as honey bearers, or honey tanks.

to hold their honey for the use of the ant colony.

McCook, writing on this point says, in part: "The imprisoned honey ants uncovered many other interesting traits; but space permits the records of but one more—from the zoologist's standpoint, perhaps, the most interesting of all. Are the rotunds (honey bearers) a separate caste? The question had been often asked, and the fact as observed require a negative answer. No sign of a separate caste appeared among the cocoons or callows. Accurate body measurements showed no difference between the workers and the honey bearers except in the distended abdomen. The conclusion was reached that the worker—majors for the most part, and sometimes the minors, grow into rotunds by gradual distention of the crop and expansion of the abdomen.

In ants, the alimentary or intestinal canal passes as a nearly straight tube through the thorax into the abdomen. There are two special expansions, the crop and the stomach, which are united by the gizzard.

The crop is in the fore-part of the abdomen; the canal opens directly into it, and therein the gathered nectar is first stored. Its elasticity, great in all ants, is highly developed in the melligers (Mexican ants), and it admits of immense expansion.

Meanwhile the backward pressure of the expanding crop forces the other organs before it, until they lie huddled together in the extreme end of the now rounded abdomen. It seems strange that creatures could live in such a condition and in apparent good health. Their habit is sedintary in the extreme, as they keep closely to their perches; but they can readily shift their positions, and when laid upon a smooth surface can move about with some celerity.

The point to note here is the gradual stages by which a worker passes into the rank of honey-bearers. Large numbers were kept under observation, and finally dissected, and the progress from 'replete' to 'rotund' was well established."

Ant Honey—Its Nature and Source

Ant honey is said to have an aromatic flavor, somewhat resembling bee honey and is agreeable to the taste. It is considered a great delicacy by the Mexicans and Indians of Mexico, and is served at marriage feasts and other social functions. Chemically analysed it showed a nearly pure solution of fruit sugar. This, however, might vary.

The usual way of serving ant honey in Mexico

is to serve the ants (honey bearers) themselves on platters, from which the ants are picked up and the honey extracted by pressure when eaten. As to the ants themselves, I do not suppose they are consumed. Not much chance of fraudulent adulteration of ant honey served in this way, no, no more than there is in our comb honey. The producer could certainly guarantee a pure article.

When ant honey is wanted, the nests must first be located, excavated, and the honey bearers, which are found clinging to the ceiling of their vaulted rooms, secured. This would, naturally, entail considerable time and labor for the small amount of honey each nest would furnish. I believe I would rather hunt and cut bee trees for a living. There may be as many as several hundred of these ants in one colony.

McCook found, from his study of honey ants in the Garden—of—the—Gods, Cal., that the source of ant honey was from the exudations from oak galls. The ants worked on the galls only at night, collecting the sweet liquid, and remained in their nests during the day. Wheeler doubts very much whether the excretion of oak galls is the only source of ant honey, and sees no reason why that much, if not most, of their honey is not obtained from coccids and aphids on the oaks and other plants nearby. It would be strange, he says, if these ants did not take advantage of a food supply so much more copious than that furnished by the galls.

I do not think that the production of ant honey will ever become profitable. Considering a strong ant colony to contain as many as 600 honey bearers, which is a fair maximum, there would be something less than a pound of honey to each such colony. (McCook). This would not be a very profitable surplus; and to obtain the honey the nest would have to be excavated and all the honey bearers crushed and killed to obtain the honey. In my opinion, this honey is, therefore, and always will be, only a luxury. Ant honey would have to sell at a much higher price than that from the bees, to be at all profitable.

Waco, Texas.

Among the new appliances that have found favor among beekeepers this year is the "Big-Smoke" Bingham Smoker. It is a giant among smokers and holds enough fuel to keep the smoke going a long time. The price is only 25 cents higher than the ordinary size.

Some Beekeepers of Texas

Conducted by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

Jose Jaun Luna, formerly of Morelia, State of Michoacan, Mexico, is a distant link between the beekeepers of Texas and Mexico.

He kept bees for many years in the tropical portions of our sister republic and has operated as many as 1100 colonies at one time. During



Sr. JOSE J. LUNA

the Zapata revolution most of his property was destroyed and he became temporarily a refugee.

While Francisco Madero was President of Mexico a great deal of attention was given to the development of the apicultural resources of the country. Mr. Luna was employed as an extension worker in beekeeping and traveled over the country under the auspices of Juan de Boer, the Belgian authority, in the work of trying to induce the Mexican beekeepers to adopt modern methods.

Mr. Luna is no stranger to Texas. In the fall of 1911, he brought an exhibit of Mexican goods to the San Antonio International Fair and remained here some time in charge of a Mexican

trade bureau. He has now returned to Texas, to study more thoroughly the methods of beekeeping in use in our larger commercial apiaries.

Don Jose has had two chief hobbies and on either one of them he can talk most instructively and entertainingly. One is silk worm culture and the other is queen breeding and race improvement of bees. In the latter work he is now carrying out some experiments in the Sunny South Apiaries where he is temporarily employed as queen breeding expert.

When Mr. Luna came to Texas last fall he planned to return to his native country as soon as he had made a tour of our larger honey producing centers but he has since found such great possibilities in queen rearing here that he will doubtless remain and go into the business on a large scale. He feels that he can serve the beekeepers of Mexico better by assisting them to improve their stock with the queens which he expects to send back home in increasing quantities. He is a valuable addition to our growing list of prominent Texas beekeepers.

AMERICAN LEAGUE NOTES

The American Honey Producers League is based upon the idea of unselfishness. The more we serve others the more will we really serve ourselves. Every manufacturer of bee supplies and dealer in honey will be benefitted by League activities. We want to make the League of particular value and service to them. In our honey advertising campaign we want to benefit every branch and angle of the honey business. What will be of value to one of us will help us all.

The members of the allied trades are expected to donate liberally to the expenses of the League. Many have already done so and others have expressed a willingness to help. For one time in the history of beekeeping let us all stand shoulder to shoulder in building the future of beekeeping. By united effort we can wield a powerful influence.

The Oregon State Beekeepers Association has taken definite steps to become affiliated with the League, according to Mr. S. Scullen, secretary. The movement is gaining strength all over the Pacific North-West and Canada. The beekeepers of British Columbia are considering the advisability of joining.

The Honey Crop Conditions

Conducted by

MISS A. M. HASSLBAUER

P. O. Box 1048

San Antonio, Texas

The condition of bees and flora in our State is so well covered by the reports from the various sections as shown in the minutes of the Texas Honey Producers Association Directors meeting that I thought I would have very little to say this month, but in our wonderful Texas climate things can change with great rapidity.

The weather condition for the past month has been very detrimental to the beekeeping business. No beekeeper in Texas need be reminded of this fact. The cold and rainy period which put an end to our expected early mesquite flow and cut down the guajillo flow to perhaps one-fourth of the normal yield, extended all over the United States. Only small areas escaped from the cold.

The Mississippi Valley and the Southeastern States seem to have suffered more than the West and Northwest. This storm period came at a very critical time for the beekeepers. Through the South, the brood rearing had reached a very high state of development, and the early honey flows had begun. In the central and northern parts the bees had just been removed from winter quarters and were in their most sensitive condition. So the loss has been severe everywhere. It carries with it but one ray of hope. That is that the honey crop will be materially reduced and this may have something to do in holding up the price of honey.

Throughout Texas, large amounts of brood were killed by chilling. In many instances, swarming had just occurred and the queen cells were chilled to death, or the virgins could not mate during cold, rainy weather which followed the frosts.

A large number of reports show that the guajillo honey flow is one-fourth of normal. The Rio Grande valley was not much affected by the cold and they have had a fair honey flow, coming from Mexican persimmon and mesquite.

One of the peculiarities of this spring is that a number of beekeepers located in the sandy land have had flows of almost pure prickly-ash honey.

This honey is seldom obtained pure as so many other plants generally are in bloom at the same time. The honey is dark amber, but has a very pleasant taste and odor.

During the latter part of April the weather has made a very decided change for the better, and the bees which were on starvation rations the third week in April, are gathering more than a living. A considerable flow from prickly-pear cactus is reported and it is predicted that if the present weather conditions continue some surplus honey will be stored from this source. However, it is reported that this honey is of poor quality.

The stormy period, besides killing the brood, has also been extremely severe on the adult bees. A large number of queens have disappeared without any seeming cause, and every beekeeper should examine his colonies to see if his queens are still in laying condition.

Our statement, which has been so often made in this column, that many plants are over-credited for honey flows, while others more important are seldom mentioned, was again brought to mind this spring when we have had flows from prickly-ash, phacelia, cactus and a number of other plants which are rarely if ever counted as honey producers.

The cold and damp weather which put an end to the mesquite honey flow was the very thing for the horsement. It stimulated this plant to such an extent that we can expect a reasonable flow throughout the sandy land in Southwest Texas. The horsement is in full bloom and bids fair to continue for three weeks or a month. The mesquite is in such a condition that if warm dry weather occurs in May and June the chances for a mesquite flow are extremely good.

THE BEESWAX MARKET

Beeswax prices still show the effect to large importations. Under date of April 15th, the several markets report, as follows:

CHICAGO: Domestic, 26-33c. according to quality. Foreign, 18-24c.

DENVER: Average yellow, 20c.

KANSAS CITY: 25c. per pound.

NEW YORK: So. American, 24-28c. Dark grades, 19c. African 15c. to 17c.

PHILADELPHIA: African, 15c. Chilean, 30c. Domestic, 20-35c.

ST. LOUIS: Domestic, 23-24c.

SHIPPING POINT INFORMATION

During the first weeks of April the weather in Southern California was clear and cool. Supplies of Extracted honey are still generally heavy but the old crop is cleaning up in some sections. The movement is slow and the market weak. A few sales are reported of orange honey at 12 1-2 to 13 cents. White sage, 12 to 12 1-2. Light amber alfalfa, 6, 6 1-2c. Light amber sage, 7 1-2 to 8c. White alfalfa 7 1-2 to 8c. Hawaiian white 7. Honey dew 4 1-2c. Prospects for the honey crop are generally favorable.

Colorado and Idaho reports shipments and demand lighter than during March. Clover and Alfalfa mixed is being offered at 8c, but buyers are holding off placing orders.

Florida has had favorable weather conditions and some honey has already been produced on account of unusually early secretion of nectar. A larger crop than last year is expected.

TELEGRAPHIC HONEY MARKETS

Telegraphic market reports under date of April 15th show a continued weaker tone in the prices of extracted honey.

BOSTON: White sage, 15 to 16c; light amber, 10 to 14c; amber, 7 to 9c.

CHICAGO: White 12 to 12½. Light Amber 9¾ to 10.

CLEVELAND: Clover, 16½ to 18c. Alfalfa 16 to 16½c.

DENVER: White, 13 to 13½c. Light amber, 12½ to 13¾c; amber 12c

KANSAS CITY: Light amber, 12 to 13c. Alfalfa, 12c. Amber, 10c.

MINNEAPOLIS: No sales. Dealers asking 12 to 12½c.

NEW YORK: Alfalfa, 7 to 9c. White orange and sage 10 to 13c. Imported, 5 to 5½c.

PHILADELPHIA: Porto Rican, 60 to 68c. a gallon.

ST. LOUIS: Light amber, 12c; amber 10c.

HONEY ARRIVALS

Honey arrivals in principal markets for the first two weeks of April are very light. Most markets report little or no demand.

CHICAGO received 10,000 pounds from various states.

CINCINNATI: one car California; one car Wyoming.

NEW YORK: Several l. c. l. arrivals from California, and New York. Moderate receipts from West Indies.

Practically every market reports that supplies of last year's honey are liberal with market weak and practically no demand.

RESOLUTIONS ON FOUL BROOD WORK

The directors and members of the Texas Honey Producers Association unanimously adopted the following resolution at the meeting held April 5th, 1921:

WHEREAS, The Foul Brood Control Service of this State, in accordance with facts obtained by investigation, maintains higher inspection, than practically any state, and

WHEREAS, it being the experience of this Association that those having technical knowledge derived from the investigation and control of bee disease problems are best qualified to enforce the provisions of the foul brood laws without fear or favor and in a manner consistent with the best interest of the state; therefore, be it

RESOLVED, that the Texas Honey Producers Association go on record as opposed to any interference whatsoever with the present service with the State Department of Agriculture, or any other branch of the State Government, until such time as it may seem advisable to put all administrative functions pertaining to agriculture under a long-time board so that those having the administration of bee disease control and similar regulatory services, may be free to perform their duties uninfluenced by political changes in the State's government; and be it

FURTHER RESOLVED, that a copy of these resolutions be sent to Governor Neff, and to each member of the Senate and House of the State of Texas.

The Legislative Committee was also instructed to use every means in its power to see that adequate appropriations be made by the Legislature for the foul brood and experimental apiary work

The new League Bulletin is off the press. Any interested beekeeper may have a copy free by writing the secretary. If you have not seen a copy it will pay you to ask that one be sent you. Your request for a copy should be addressed to the secretary, H. B. Parks, San Antonio, Texas.

The Beekeepers' Item

A Small Item in Itself, a Big Item for Beekeepers.

LOUIS H. SCHOLL Editor and Publisher

Published Monthly.

Subscription Price\$1.00 the Year

Entered as second-class matter Dec. 13, 1916, at the Postoffice at New Braunfels, Texas, under the Act of March 3, 1879.

CHANGE OF ADDRESS: When a change of address is ordered, both the new and old must be given. The notice should be sent as promptly as possible before the change is to take effect.

DISCONTINUANCES: Notice will be given just before expiration. Subscribers are urged, if unable to make payment at once after expiration, to notify us when they can do so. Any one wishing his subscription discontinued should so advise us upon receipt of the expiration notice; otherwise it will be assumed that he wishes **THE BEEKEEPERS' ITEM** continued and will pay for it soon.

ADVERTISING RATES: These will be furnished upon application.

The season so far has been one of much speculation. The weather conditions have been so varied since our report of last month, that the condition of bees and flora have changed from the very favorable at that time to a much less admirable state. But there have been some rains in many parts, and a return of warmer weather, so that the abundance of minor nectar yielders will help to keep up the colonies. Of course, the early spring honey flows did not materialize where they were expected in the Southwest, except in a portion of the lower Rio Grande Valley in Texas, and near the South-east Texas coast line. Nothing definite can yet be said on conditions in most parts of the whole country.

The editor has received many votes and resolutions of thanks, upon numerous occasions, from the membership of the Texas Honey Producers Association because so much space of our columns has been allotted to association matters. This, of course, is appreciated, but the principal reason for giving the matter publication is because we feel that it means a great deal for the general upbuilding of the industry. We feel that, although the Texas association gets a good share of free advertising out of it, this very publicity, reaching as it does, to many parts of the world, will help to bring about similar efforts elsewhere than in Texas alone. The editor believes in co-operative organization of beekeepers anywhere and every-where, and letting others know how they do it successfully in the greatest

The Beekeepers' Item for April, 1921

of honey producing states and will give others an idea that may result in similar accomplishments. Then to be thanked by those who appreciate this makes us feel good indeed.

The editor enjoyed attending the Guadalupe Valley Beekeepers Association picnic near Seguin, Texas, on April 13th, as announced in our last issue. There was a good crowd, a fine program and close attention. In fact we have attended very few beekeepers meetings where a better program was presented. The members of that district association, comprising Guadalupe, Comal, Hays, Caldwell and Gonzales Counties, are all live wires, and they deserve much credit for their activities.

THE DR. MILLER MEMORIAL FUND

We promised our readers faithfully that we would present this month a list of all who had contributed to the Dr. C. C. Miller Memorial Fund, but we are compelled to disappoint those who remember our promise. However, although we had our own list ready, we received a kindly letter from Mr. C. P. Dadant, Chairman of the Committee, asking us to withhold this until the following issue of our journal. The other journals have also agreed to do so, in order that all the lists might be more complete, since some had not been turned in. As soon as we get the full lists of Texas contributors from the others who have them we will get them ready for our next number. In the mean time, we want to hear from all who have not yet sent in their contributions. You'll want your name added to the list.

CALE IS WITH THE DADANTS

The hegira of institutional beemen and investigators to places in commercial beekeeping goes merrily on. We have just accustomed ourselves to the idea of Adkins being with the Lewis Co., DeMuth with Gleanings, Parks with the American Honey Producers League, Watson with Texas Experiment Stations, when word comes that G. H. Cale has resigned from the staff of the U. S. Dept. of Agriculture and accepted a position with Dadant & Sons.

Mr. Cale will have charge of about 800 colonies of bees and will act as Experimental Apiarist on the American Bee Journal staff. With his wide experience he should be a valuable man.

WHAT OUR SCHOOLS CAN DO

The value of beekeeping for out-door recreation and honey as a food could be very advantageously brought to the attention of the public through the school children. Since they are always ready to grasp suggestions offered them, and which not only remain in their own minds but find their way into the homes, this offers a splendid opportunity for educating the general public of today and that to come, about the usefulness of beekeeping and honey production. This is shown in an example of how one little girl of the sixth grade in one of the public schools



G. A. CALE

of San Antonio, Texas, wrote a short composition on the food value of honey as given here:

HONEY AS A FOOD

Honey, as you know, contains no glucose or raw sugar. It is more healthful and digestible than any other sweet on the market.

The first sugar was brought to England by Marco Polo in about the thirteenth century. Honey was used entirely by the colonies until some sugar was imported in the time of Queen Elizabeth by the Virginia colonists. It was then considered a luxury and under the head of spices.

Most of the diseases of man today are caused by eating the undigestible sugar, and which could be avoided by using pure honey. Such dis-

eases as diabetes, kidney trouble, rheumatism and gout, have been helped and cured by omitting the sugar from the diet and replacing honey instead.

Honey may not only be used as a syrup on the table for you find that a large number of recipes for candy, cake and other things call for honey as the only sweetening.

You will find that with the constant use of honey you will not only be pleased with its palatableness, but will soon consider it a necessity in your home.

LEONORA JEANNE HASSLBAUER.

TEXAS BEEKEEPERS SUMMER SCHOOL

The following is a tentative program and those who will have charge of classes of the Beekeepers School to be held at the Texas A. & M. College, College Station, Texas, July 26-27-28th:

Tuesday Afternoon:

- Dr. Traquary, (Subject to be suggested by himself).
- E. G. LeSturgeon.
- Mr. Watson.
- Mr. Burlison, (subject, "Pound Packages").

Wednesday Morning:

- Mr. Demuth, Two hours.
- Mr. Rude, Forty-five minutes.
- Mr. Ault.

Wednesday Afternoon:

- Mr. Hawkins.
- Mr. W. O. Victor.
- Mr. R. R. Reppert, (subject, "Extension Beekeeping").
- Mr. A. H. Alex.

Thursday Morning:

- Mr. H. B. Parks.
- Mr. F. C. Pellett.
- Mr. Louis H. Scholl.
- Mr. T. P. Robinson.

Some changes are to be expected and we will give the program in full in a future number of THE BEEKEEPERS ITEM. No beekeeper can afford to miss this meeting. Texas beekeepers should feel congratulated on the excellence of their meetings, as we have had letters from several beekeepers outside of the state who have signified their intention of being present. Tell your neighbors to come to the big meeting and see that you bring your share of the 500 to the school.

Gossip With Our Neighbors

Discussed by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

Bro. Little is to be complimented on for the April number of the *Domestic Beekeeper*. He is making this paper cover the beekeeping interests of the U. S. The South is represented by articles by H. D. Murry, and Louis Biedger of Texas and a well merited tribute to the industry by Bro. Wilder of the *Dixie Beekeeper*.

It is a pleasure to find a general farm paper like the *Texas Farm & Ranch* giving a good deal of space to beekeeping and honey interests. Jno. T. Bartlett, in a recent number, calls the attention of the housewife to the work of Dr. Sackett of Colorado, who proved that few if any disease germs harmful to the human race are ever carried in honey.

Our friend Maeterlinck will have to watch his laurels. In the April *Dixie Beekeeper*, J. E. Sutton pulls a rare line of prose poetry on the death of a drone. Why let the man from over the sea have a monopoly on this class of bee literature? It is interesting. Too often we accept the most beautiful thoughts in Nature as commonplace and matter—of—course. Mr. Sutton can see and describe the beauties in them.

In the *Australian Beekeeper*, W. S. Pender reports a heavy jelly-like honey produced from the Manuka or cabbage tree of New Zealand. This honey is almost, if not quite unextractable. When it does leave the combs it is in lumps. Mr. Pender saw some of this honey in aluminum combs and the extractor was run a long time at high speed, and even then there were many cells of it left in the combs.

Through the courtesy of Major Shallard, we are in receipt of copies of the *Apicultural Journal* published at Brisbane, Queensland, and also one of the *Australian Beekeeper*, published at West Maitland, New South Wales. These publications are very interesting as the beekeepers of Australia have their summer when we have

our winter. The *Beekeeper* has an article on the use of cocoa as a substitute for pollen. An experiment has found that this substance is the best substitute yet tried.

The *Apicultural Journal* of Queensland, Australia, publishes a reprint of the article on cotton as a honey plant, which appeared in these columns. The Editor comments, as follows:

“On account of the increased interest that is being taken in cotton production in Queensland, we have frequently been asked whether this plant can be recommended as a honey producer. The article from *The Beekeepers Item*, a practical little journal issued in Texas, America, answers the question. It is from the pen of the Editor, Louis H. Scholl, who has had a long experience and is well qualified to deal with the subject.”

W. W. Mendleson in the April number of the *Western Honey Bee* gives a very good summing up of the case of Extracted vs. Comb Honey for the coming year and decides in favor of extracted honey. We have a product here in Texas that beats them both, “bulk comb honey.” We use no extra equipment. It takes no longer to produce it for market and yet we get a better price and have a greater demand for it than for extracted honey.

E. S. Miller has an article in the April *American Bee Journal* on increasing the consumption of honey. He points out that four-fifths of all the pages in our bee journals are devoted to methods of increasing honey production and too little thought is being given to the business of selling the honey and creating a demand for it. He especially stresses the advisability of advertising the economy of purchasing honey in larger packages than the small glass jars usually sold by the retail trade.

Dr. A. L. Melander, Entomologist of the State College of Washington, has been conducting a series of experiments on the various relationships between beekeeping and orcharding. In the April *American Bee Journal* he presents the results of some of these. The value of the bee as an agent in cross pollination is proven and emphasized. Dr. Melander also has an article in April *Gleanings* on “Spray Poisons and Bees.”

Texas Honey Producers Ass'n

Notes by

E. G. LeSTOURGEON, Manager

P. O. Box 1048 San Antonio, Texas

Beeswax is still a drug on the market. We do not think it wise to sell any at the present prices. Have it made into foundation. We are paying 20 cents per pound for wax, in cash, and 25 cents in trade, f. o. b. San Antonio for good clean wax.

The beekeepers of Texas are taxing themselves 1c per colony, the money to be spent in advertising Texas Honey. Have you sent in your tax? A total of nearly \$300.00 has been collected. Send your remittance to the Association Secretary.

The Association is in the market for all the spring crop guajillo and catsclaw comb honey that it can get. The members placed the price at 20c basis with 1c raise for each smaller size. If you have any ready to ship send in a list of the number of cases of each size you have so that we can send you shipping instructions.

The California beekeepers are not afraid to advertise. They are putting full page display advertisements in the newspapers in our trade territory and are loading up our merchants' shelves with western honey. If any of you take the Dallas News, look on page seven of the issue for March 27th: This advertising costs lots of money but it will get results. We must all help to push Texas honey and try to keep the advantage we have had.

Are you a booster or a knocker? Where do you stand? This year is going to be one of low market prices and poor demand. A reconstruction of the whole commercial system is taking place. The old lines of produce distribution are largely broken up. New lines must be constructed and during this rebuilding the beekeeper may have to accept a low price for his honey. This demoralization of markets, however, gives the beekeeper a chance of a lifetime. In probably one case in a hundred, the beekeeper has developed his home market. Now is your chance.

Build up your home trade and be sure of sales and a market. You are not bound to sell through our association as in the case of many co-operative associations. You are your own free self. In this trying hour the members must stand together. Don't cut prices. Develop your home market. Stand by the Association.

THE ASSOCIATION HONEY PRICE

In carrying out the instructions of the Directors of the Association at the last meeting, to name a selling price for light amber extracted honey based on 12 cents to the beekeeper we have quoted the grocery trade as follows:

		Per Pound	Per Case
2-60's	Lone Star Extract Honey	16c	\$19.20
1-60's	Lone Star Extracted Honey	17	10.20
6-10's	Lone Star Extracted Honey	18	10.80
12-5's	Lone Star Extracted Honey	19	11.40
20-3's	Lone Star Extracted Honey	20	12.00
24-2½'s	Lone Star Extracted Honey	21	13.20
40-1½'s	Lone Star Extracted Honey	22	13.20

The above price is the cost to the retail grocer prepaid to his station anywhere in our territory. The Association price to the wholesaler or jobber is the same as this list price, less 12½ per cent.

The retail price to consumers, based on the above prices should be about 24c per pound or \$2.00 per gallon. Do not make the mistake of selling to the grocer and to his customers at the same price. The retailer must make a profit. It costs him something to do business. He will help you develop a home trade if you treat him right and protect his price.

MEETING OF THE DIRECTORS

The Directors of the Texas Honey Producers Association met at 2:30 P. M., April 5th, with the following present: W. C. Collier, W. O. Victor, Louis H. Scholl, Ambrose Johnson, Louis Biediger, Wm. Zimmerman, E. G. LeStourgeon, R. A. McKee and Alma A. Hasslbauer.

Because of the importance of this meeting, called for the purpose of naming the price on new honey, the membership of the Association had been invited to attend the Directors meeting so that those interested in the marketing of the new crop could lend suggestions and express their views on the matter.

The first subject brought before the Directors was the number of new members of the Association enrolled since the January meeting; these being R. R. Reppert, T. L. Ernst, J. W. Orr, Sid-

ney Walker, Oliver Eikel, W. T. Newsom, D. D. Fairchild, S. W. Stanfield, Wilson & Hamilton.

The next subject, one of the greatest importance to the beekeeping industry at this time, was discussed in length and in detail. The president called on the members for reports on their respective localities, and the first to respond was W. O. Victor. He stated that the prospects were for about one half of a normal crop in the Uvalde district. This he attributed to the weather conditions as it had been very dry up to March 1st in Uvalde and Medina Counties. The bees had built up rapidly since.

E. B. Ault spoke of the splendid condition of the bees in the Rio Grande Valley and said that they would have a good crop. Mr. Ault expected to take off twenty to forty thousand pounds upon his return to the valley.

Frank Talbot reported conditions in Frio county as being very poor. He said that the guajillo was in very poor condition; catclaw in bloom but not yielding much. The bees were whitening combs but it was too early to estimate the crop. The mesquite was giving a little surplus.

Louis Biediger reported the guajillo and mesquite in bloom but no honey yield. The bees are building up on arnica weed, but he expected no spring honey in Medina County.

G. E. Taylor reported practically the same as Mr. Talbot, as being the condition in Bee County.

R. A. McKee said that in East Texas, particularly in the ratan vine section, there was an exceedingly good honey flow. He believed that with two or three weeks favorable weather they would have a large crop. The recent cold weather did not set the ratan back. Mr. McKee believes, in his opinion, that ratan honey is equal if not superior to guajillo honey.

Ambrose Johnson reported a good mesquite flow in Webb county, near the border, but no guajillo.

Louis H. Scholl said that his observations showed that there would be no mesquite flow although the prospects had been fine for one before the rain and recent cold spell which set back everything. The early breeding of the bees used up their stores and they were at a point of starvation now he said. He was feeding.

O. P. Hyde had no report to offer, as he is living in San Antonio at present.

Wm. Zimmerman, who is practically in the same territory as Mr. Biediger, said that his bees were getting a little mesquite but no guajillo.

M. B. Hinton of Karnes County, reported bees in better condition than ever before. There was a light mesquite and catclaw flow, but none from guajillo. He reported good prospects for horse-mint which he considered better honey than ratan.

J. C. Cox said that in Frio County prospects were favorable now but the future looked bad. Did not expect more than one-half crop from guajillo, catclaw and mesquite.

B. L. Milam said that Mr. Talbot had correctly reported conditions in his locality.

E. C. Goodwin, of Live Oak County, stated that bees were not as strong as they usually are at this time of the year. Guajillo was a complete failure as far as the honey crop was concerned. Catclaw, the scrubby kind, had bloomed out, but he expected some surplus from the tree variety. He said that rain was needed in his locality for the horsemint.

J. L. Barkmeyer said his report for the southeastern part of Bexar county would be the same as expressed by Mr. Zimmerman.

W. C. Collier said that in Goliad county the bees were working the mesquite a little but he had no prospects for a future early crop.

J. A. Simmons of Uvalde county reported good prospects. He said the bees were getting a surplus now from guajillo. The mesquite was in full bud, but it was too early to estimate the crop from this source. He did not expect to extract any honey before the first of May.

A report having been given from each of the sections producing early spring honey, President Collier called for expressions from the various members as to what they believed the new honey should be marketed at since they heard the reports of the crops from the various sections.

The following prices for new honey were suggested by Mr. Victor, 16c extract basis, 20c comb basis.

Mr. McKee gave 13½ cents extract basis, as on account of the competition of other sweets we cannot set the price too high.

Mr. Johnson said that prices must be regulated by the price of preserves, syrups, etc. The grocers are cutting prices on jellies and jams. He suggested that the manager give a report on the present market quotations of honey in the larger markets and outline his observations of the condition of the honey market.

Mr. LeSturgeon then stated that white sweet clover and clover mixed with alfalfa had been of-

ferred him from 7 to 9 cents, and any quantity or number of car loads could be had at these figures.

Mr. Taylor said that supplies are awfully high. We cannot produce honey with high priced supplies unless we receive sufficient returns from our honey. Would suggest 16 and 20 cents basis.

Mr. McKee said that we must bring the price of supplies down. "Don't buy," was his suggestion.

Mr. Hyde mentioned that it was a hard proposition to name a price. About 16 and 20 cents basis, but if we have competition we must meet it. If we offer better honey we are justified.

Mr. Victor emphasized the fact that they would have only about one-half a crop of the fancy guajillo honey and since the trade always seemed to prefer this honey he believed that the fancy article should command 16 and 20 cents. He said the beekeepers in his locality would expect 16 and 20 cents.

Mr. Ault believed we ought to have higher prices for early and good quality honey.

Mr. McKee emphasized the East Texas honey situation as being one that deserved very much consideration in fixing the honey market price because the eastern part of the state was producing large quantities of honey and the territory was developing quickly. He suggested that some trade also demanded dark colored honey. He explained that in New York people are acquainted with and accustomed to buckwheat honey which is dark and strong in flavor. These people have acquired a liking for this honey and in many instances prefer it. Mr. McKee said that the honey crop would not be short, speaking in broad terms for Texas, because the eastern part of the state would supply the shortage of the western part.

Mr. Scholl then spoke relative to the prices of the new crop honey. He said that while darker honey is in demand in some localities it is never sold at a high price as the lighter colored honey. He believed that we should establish a price of about 16c extract basis and 20c comb basis for the light colored, mild flavored new honey. He said that we must have at least two fixed prices on honey. One price on the light or white honey and another on darker grades.

Mr. Ault told his experience in selling honey with three colors and qualities as samples. He quotes the darker or cheaper first, then the better quality and last the lightest colored, best flavored honey, which usually sells to the customer despite its higher price. Mr. Ault suggested the

price of 16c and 20c for early light colored honey.

Mr. Cox, who has had quite a bit of experience in marketing honey for years, said that he did not think the price should be named too high. People who last year refused 18 and 14 cents for their honey cannot now get 12 or even 10 cents for it. He named an opening price of 10c extract basis and 14c comb basis as being the prices in his opinion.

Mr. Hinton said that he found labor as high as last year, and since supplies are also so high, he would suggest naming the price high enough to cover these because it would be easier to come down in price than to raise the price. He thought that the differential in the extract and comb honey price should be greater than four cents. He suggested naming the fancy white guajillo price at 15c extract basis, and 20c comb basis. He believed there should be a difference of four cents in the price of mild flavored honey and such grades as horsemint, golden rod, etc. He would name such a price around 12c basis. He said that he, too, always sold the lighter honey more readily than the darker.

Mr. Simmons suggested 18c extract basis and 20c comb basis for new honey. He bases his figures at this price because of the weak condition of the bees and necessarily a small crop.

Mr. Talbot did not believe that the price of honey should be named too high because the jobbers would be afraid to handle it. He also was of the opinion that there should be a larger difference in the price of comb and extract honey. He suggested 14c extract basis and 18c comb basis.

Mr. Goodwin explained that when we had a big crop of honey and a 7 and 8c normal extract price we could not make a difference of 4c per pound between extract and comb honey. If we make this difference now we would be expected to maintain it. He considered naming a high price on account of the high price of supplies but did not want so large a difference in the extract and comb. He named 17c and 20c per pound, extract and comb, respectively.

Mr. Milam said that if the weather remained uncertain we should name high prices and if we later have favorable weather to name lower prices.

Mr. McKee referred to the fact that honey is always regulated in price by that of sugar. Carloads of honey usually sell a little less than the sugar price. We must compete with sugar and

other sweets. If we cannot make money raising honey and selling at the price of sugar we beekeepers must go out of business.

Mr. Gilman suggested 14 and 18c extract and comb basis.

Mr. Biedger said that we might name high prices but we would not sell at such. He named 8c extract and 12c comb price.

Mr. LeSturgeon said that we might be able to sell the "cream of the crop" at the high prices suggested, but the bulk of the honey later on would bring much lower figures.

Mr. Victor again said that the Uvalde people had decided that their honey was a luxury in its being a gilt-edge product and ought to get a good price. He said that they wanted to sell enough honey at the high price to pay for the high priced supplies.

Mr. Hyde said that concerning the difference in price of extract and comb honey the difference should not be figured by cents but by percentage. If the extract is 8c the comb should be 10c, or about a 25% advance.

Mr. Scholl said that in view of the fact that we have abnormal conditions and an apparent small crop, and considering the certain demand for the early honey, we might be able to get 16 and 20c. When the later honey is for market we can lower our price accordingly. We beekeepers may feel as though we should get better prices, but we are not in touch with the market. He believes that we should "produce more and sell more".

Mr. LeSturgeon gave a synopsis of the honey market for the past five years, as follows:

"During 1916, there was a great foreign demand for honey because of the war and the need for sweets in Europe and the lack of production in that country. For the next few years the sugar crop was short, and the people not only were urged by the government to eat more honey, but necessity demanded that they use honey where other sweets had been eaten before. A greater amount of honey than ever before was consumed.

"After the armistice had been signed, foreign countries wanted money, and their honey, as well as other products were sent to America. West Indian and all foreign honey was rushed to our markets because the American dollar was recognized and had a value that no other dollar had."

"At the Convention of the American Honey Producers League, in February, at Indianapolis, a report was given of the honey market conditions of practically every state. The gentlemen

from Utah reported that they had enough honey to float a ship in New York Harbor. The California representative said they had twenty-seven cars in California at that time and had no market for it. The Idaho crop of 1920 was still on hand. The Colorado people had flooded the Chicago market which also had received great quantities of Guatemala honey, until the price has been going down and down and the buyers are afraid to buy. We are here now to get as much as we can for our new comb honey, but is this fair to the East Texas beekeepers and others who will have later honey, to quote such a high price on this white honey. We will quote honey to the trade at the prices the members name, but the Association will not buy honey at 16 and 20c per pound basis. We will take orders and send them to the beekeepers to fill, but we will not buy a pound of honey at this price and take the chance of not disposing of it and having the Association funds tied up and jeopardizing the beekeepers funds."

One member asked how long the spring quotations of honey would be in effect? It was suggested that as long as honey sold at the price named it would be quoted at those figures, but if it did not move, there would be no benefit in retaining the prices.

A motion was made by Mr. Scholl, that the opening price for light spring honey be 16c for extract basis and 20c for comb basis. This being the price the beekeepers are to receive, less the association regular handling charge. This motion was seconded by Messrs. Hyde, Hinton and Zimmerman and carried.

Mr. McKee then asked if the Association wanted to sell only Southwest Texas honey, or all Texas honey.

Mr. Hinton explained that all white spring crop honey should be handled at this price regardless of where it was produced.

Mr. McKee said that there were hundreds of barrels of honey in East Texas that must be sold and will not be sold unless the price that the association has named will be cut. He said that all of the East Texas honey could not be disposed of at 16 and 20c. East Texas honey would sell at a 12c basis regardless of the association price and the Eastern beekeepers will thus be forced to antagonize the association.

Mr. Hyde explained that the price of honey must be fixed on color of honey as well as flavor since the trade demanded light colored honey.

He said that the market only took amber honey when quoted at a lower price than the white honey. He suggested that the eastern people sell their honey through the Association at a lower basis.

Mr. McKee then made a motion that the price of amber honey of mild flavor shall be 12c extract basis. This motion was seconded by Mr. Johnson, and carried.

Mr. McKee expressed his appreciation for the efforts that the Association members made in protecting the members of East Texas and thanked the Association for naming a price on this grade of honey.

The next subject for discussion was the advertising fund that has been increasing to the amount of several hundred dollars. Suggestions were in order for the best use to be made of this money.

Mr. Zimmermann made a motion that the suggestion of Mr. Ault at a former meeting be adopted and the Association print a pamphlet on honey, its uses, etc., to be sold to the beekeepers at cost for distribution, the proceeds from the sale of the pamphlets to return to the Advertising fund, to be used again for advertising purposes. This was seconded by Mr. Biediger, and carried.

Mr. LeSturgeon suggested the buying of an addressograph machine because of the great amount of labor that could be saved on the enormous amount of mail that the Association is putting out. Mr. Scholl made a motion recommending the buying of an addressograph. This motion was seconded by Messrs. Zimmermann and Victor, and carried.

The International Exposition and Live Stock Show having approached the Association for assistance in the financing of the scheme for the bettering of all Texas industries, and having assessed the Texas Honey Producers Association for the sum of \$100.00 as their contribution, which might be paid in installments, the matter was brought to the attention of the members by the Secretary, who read a letter from this association explaining the value of the fair in an advertising way.

Miss Hasslbauer recounted the value that has already come from the exhibit that the Association has had at the Dallas State Fair and said that she believed that the amount that was asked of our association would soon return in the advertising value that it would give the beekeepers

of the State. She explained that the business which the association has done with Mexico alone since the Dallas Fair has more than defrayed the expenses of the Association exhibit, as this business resulted from the inspection of the exhibit by the representatives of the Mexican government.

A motion was made by Mr. Ault to contribute the amount of \$100.00 to the International Exposition and Live Stock Show. This was seconded by Mr. Talbot, and carried.

Mr. LeSturgeon told the members of the sacrifice Mr. Scholl made in giving space to the Association for the publishing of the minutes of its meetings, etc., and suggested that the association voice its appreciation of Mr. Scholl's kindness. Mr. McKee made a motion extending a vote of thanks to Mr. Scholl for giving publicity to the Association. This was seconded by Mr. Ault, and carried.

Mr. Scholl thanked the membership for expressing their appreciation and said that he wanted his paper to be the greatest possible help to the beekeeping industry of the state.

The Manager expressed his regret that the Association was not able to mail out the dividend checks to all members. The Association funds have been tied up in supplies and although most of the goods have been shipped to the members, they had not paid cash for the goods. He said that members were taking advantage of their 50% credit and on account of the lateness of the honey crop, they have not been paying for the supplies as soon as expected. The sales of supplies have been normal and the Association has been doing a wonderful business in the bee supply line. The Association expects to mail the balance of the dividend checks out very soon.

A motion to adjourn was made by Mr. McKee, seconded by Mr. Victor, and carried.

WILLIS C. COLLIER, President.

A. M. HASSLBAUER, Secretary.

San Antonio, Texas.

Q—What is this Tarsonemus Woodii, people are talking about?—B. E. E., Washington.

A—Bee cooties.

Q. Who was the first entomologist of whom we have record? A. L. E. West Va.

A. Jason is the first one we have read after. He went on an expedition in search of the golden fleas.

CLASSIFIED WANT ADVERTISEMENTS

Rates in these columns are 15 cents a line. Minimum charge will be 50 cents. When sending advertisements for this department it must be so stated or we will not be responsible for errors.

BEES AND QUEENS

PURE ITALIAN QUEENS—Golden or leather colored; packages and nuclei; one untested queen, \$1.50; 6, \$7.50; 12, \$13.50; 50, \$55; 100, \$100; virgins, 50 cents each. Packages 24 and under \$2.25 per lb.; 25 and over \$2.00 per lb. nuclei, 1 frame \$4; 2 frame, \$6; 3 frame \$7.50; queens extra. One story ten-frame colony with queens, \$12. Golden Star Apiaries, New Almaden, near San Jose, Calif.

ITALIAN QUEENS—Leather-colored, famous three-banded stock. Untested, \$2; tested, \$3. Safe arrival or money refunded. Deliveries in May, June, July, August and September. C. M. Elfer, St. Rose, La.

GOLDENS THAT ARE TRUE TO NAME—Hundreds of testimonials annually. Write for list, every queen guaranteed. One Selected Unt \$1.50; 6, \$7.50; 12, \$12.50; 50, \$55; 100, \$100. Garden City Apiaries, San Jose, Calif.

THREE BAND ITALIANS ONLY—Output over 8,000 queens a year. Selected Untested, one \$1.50; 6, \$7.50; 12, \$13.50; 50, \$55; 100, \$100. Safe arrival I guarantee; booking orders now. H. G. Dunn, The Willows, San Jose, Calif.

BEES BY THE POUND—Also pure-bred queens; booking orders now for delivery after March 15th. Everything guaranteed. Brazos Valley Apiaries, Gause, Texas.

PURE LEATHER COLORED QUEENS—reared from the Breeder that produced 200 lbs. of Orange Honey while the rest of 600 colonies averaged 50 lbs. to the colony. Prices: 1 \$1.50; 6 \$8.00; 12 \$15.00; 50 \$62.00; 100 \$100.00. I guarantee safe arrival and every queen to be A 1. Bees in 2lbs. packages at \$5.00 per 2lbs. of bees with queen. Geo. E. Sigmont, 524 So. Main Str., El Monte, Calif.

FOR SALE—Queens, three-banded, after April 4th. One, \$1.50; 1 dozen, \$14. Arthur Grollimund, Yancey, Tex.

BEES BY THE POUND, ALSO QUEENS—Booking orders now. Free circular gives prices, etc. See large ad. elsewhere. Nueces County Apiaries, E. B. Ault, Proprietor, Calallen, Texas

PACKAGE BEES—With* or without queens. Three-banded Italians, bred for business. Safe arrival and satisfaction guaranteed. Caney Valley Apiaries, J. D. Yancey, Mgr., Bay City, Texas.

BEES AND QUEENS

QUEENS AND NUCLEI—H. Brenner, queen breeder. See advertisement on page 87 of this issue. Mrs. J. T. Fitz Simon, Castroville, Texas.

QUEENS—Untested Italian queens, one \$1.50; 12, \$15.00. Honey getters. Sternberg Bros., Box 64. Lockhart, Texas.

QUEENS—Three-Banded Italians only that have been bred to a high standard of excellence. Never had disease in my apiaries. Safe arrival and satisfaction guaranteed. Untested queens, \$1.50; 12 for \$15. Tested queens, \$2.50; 12 for \$25. Jul. Buegeler, New Ulm, Tex.

QUEENS—THE FAMOUS BRENNER Strain of Three-Banded Italians. Untested, \$1.50 each; \$15 per dozen. Dr. A. Wright, Kingsbury, Texas.

ARIZONA QUEENS—Immediate delivery \$1.00 to \$3.00, exceptional strain, Pound bees. Arizona Apiary, Clifton, Arizona.

ITALIAN QUEENS—After April 1st, 1921, tested \$2.00 each; untested, \$1.25 each. Packages and nuclei. 2-frame nuclei with bright breeding queen \$10.00 Order early. E. M. Giddings, Blythe, Riverside County, Calif.

BEES FOR SALE—Italian bees 2 lb. packages. Also queens. Write for prices. J. Wilson Jones, Box 274, Falfurrias, Texas.

GOLDENS THAT STAY GOLDENS—Queens, May and June, untested, \$1.50; \$15.00 per dozen. Tested, \$2.00; \$21.00 per dozen. J. W. Rice, Box 64, Fort Smith, Ark.

QUEENS—Guaranteed three-band and Golden queens reared in separate yards. Book your orders with us and get pure stock. Orders filled in rotation. Begin shipping March 15. Untested, \$1.75 each, tested \$3.00 each. Ask for circular and prices on quantities. Dr. White Bee Co., Box 71, Sandia, Texas.

GOLDEN BEAUTIES and the Famous 3-band Italian queens. Tested, \$1.25, untested, \$1.00. No discount on large orders. Safe delivery and healthy stock guaranteed. C. B. Bankston, Buffalo, Texas.

GOLDEN ITALIANS—2 lb. packages and untested queens. Delivery guaranteed. Money returned at once if not able to fill order. Untested queens. \$1.50; tested \$2.50. J. E. Sutton, Linden, Alabama.

SPECIAL NOTICES

WANTED—A small sized Honey Extractor, Must be in good working shape Address P. O. Box 252, Kerville, Texas.

WHEN IN NEED of bee supplies, comb, foundation, etc., always get our prices before ordering. Send us your slum gum to be rendered for you—the best results obtained. Miller Box Mfg. Co., 233 N. Avenue Eighteen, Los Angeles, Calif.

SAVE QUEENS—Push in Comb Queen Introducing Cage, 25c postpaid. Try it. Safest way known. O. G. Rexford, Winsted, Conn.

TRY THEM—These classified want ads. Others say they are "result getters," why not for you? Only ten cents a line—the cheapest way to let others know what you have or what you want

BEE BOOKS WANTED—On account of frequent inquiries we have decided to buy and sell for our readers such bee books and journals as they may like to offer or wish to buy. The Beekeepers' Item, New Braunfels, Texas.

POSITIONS WANTED.

POSITION WANTED—Experienced beekeeper desires a place in apiary work for the season. Queen rearing experience. Can furnish references. J. F. Warmuth, Calallen, Texas.

HONEY AND WAX.

WAX REFUSE—Don't throw away your "slum-gum" from your wax meltings. Save them up and ship to us. We will get a lot of wax out of it for you and pay you highest price for it or make it into foundation for you. Write for rates. Dadant & Sons, Hamilton, Illinois.

USE OUR CLASSIFIED ADS

TYPEWRITERS

REAL values in second-hand and rebuilt typewriters, a guarantee of satisfaction with each purchase.

Remington No. 10	\$35.00
Oliver No. 5	27.50
L. C. Smith No. 2 back spacer ..	37.50
Underwood back spacer	47.50
Remington No. 6	15.00

These machines are guaranteed in perfect working order and if not so may be returned. Corona and L. C. Smith, sole factory dealer. A. F. BEYER, 310 West Commerce Street, San Antonio, Texas.

STATEMENT OF OWNERSHIP,
CIRCULATION, ETC., OF THE
BEEKEEPERS ITEM, PUBLISHED AT NEW BRAUNSFELS, TEXAS AS REQUIRED BY THE ACT OF AUGUST 24, 1912.

Publisher, editor, business manager and owner, Louis H. Scholl, New Braunsfels, Texas; stockholders, bondholders, mortgagees, or other security holders, owning more than one per cent of stock, none.

(Signed) Louis H. Scholl,

Editor and Owner

Sworn to and subscribed before me this 1st day of April, 1921.

(Signed) MARTIN RUPPEL,

Notary Public.

My time expires June 1, 1921.

SEEDS AND PLANTS

FOR SALE—Annual white sweet clover seed. Blooms in ninety days. Will grow from 5 to 6 feet high under favorable conditions. Limited amount at 25c per oz. Ed Plumhoff, Waxahachie, Texas.

MISCELLANEOUS.

FOR SALE—American Bee Journal of 1910, 1911, 1915, 1916. Each volume 70c. Gleanings in Bee Culture of 1910, 1911, 1912, 1913. Price per volume 75c, postpaid. All in good condition. Aug. Teufel, Round Top, Texas.

THE DOMESTIC KEEKEEPER, becoming known as "the livest bee journal published," reaches every interest, contains good articles, timely information, all the news worth printing. Monthly, \$1.50 per year. Sample copy free. The Dometsic Beekeeper, Lansing, Mich.

WANTED—To buy live snakes, live animals, pets of all kinds. For prices, address W. Odell Learn & Co., 504 Dolorosa St., San Antonio, Texas.

HONEY LABELS—New designs. Catalog free. Estern Label Co., Clintonville, Conn.

HIVE BODIES—We have some ten frame, white pine, dovetailed hive bodies, painted white, with Hoffman frames, about 200, to offer. Write for price. The Louis H. Scholl Apiaries, New Braunsfels, Texas.

AUTOMOBILE REPAIRS

AUTOMOBILE OWNERS should subscribe for the AUTOMOBILE DEALER & REPAIRER; 150-page illustrated monthly devoted exclusively to the care and repair of the car. The most practical magazine for beekeepers who own automobiles or gasoline engines. The "Trouble Department" contains five pages of numbered questions each month from car owners and repairmen which are answered by experts on gasoline engine repairs. \$1.50 per year; 15 cents per copy. Postals not answered. Charles D. Sherman, 106 Highland Court, Hartford, Conn.

BEE SUPPLIES

CROSS CUT SAW—One man cross cut saw manufactured by Folding Saw Machine Co., Chicago, in good condition. Have had it only a year. Postal brings further information. Will take \$16 for it F. O. B. Brownwood, Texas. Write W. E. Malone, Ebony, Tex.

FOR SALE—New metal spaced Langstroth frames, and one of the best nailing devices for nailing Hoffman frames. Send for low prices. Wm. Craig Aitkin, Minnesota.

Italian Queens, Brenner Strain.

My cells are reared by the Brenner method.

Queens are mated in 2- or 3-frame, full depth nucleus boxes.

Any queen dead or alive, if returned at once in the original cage, will be replaced, or money refunded if desired.

Have secured Mr. Brenner's services as queen breeder.

Orders will be filled in rotation.

Untested queens, each-----\$1.50

Breeding queens, each----- 3.00

2-Frame Nucleus with untested queen----- 9.00

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F. O. B. Castroville, Texas.

If clipped queens are desired state in your order.

Minute instructions sent with every nucleus.

MRS. J. T. FITZ SIMON

Castroville, Texas

What Our Subscribers Say

In determining the merits and popularity of a publication there is nothing that goes farther in establishing this than the vast number of unsolicited testimonials from the readers themselves. These have been so numerous that only a few appear in this space. But even these will serve to show how well they like their bee journal.

Enclosed find one dollar (\$1.00) for which please extend my subscription to The Beekeepers Item for one year. Am glad to note the growth of your valuable bee paper.
Seguin, Texas. **GLENN M. ANDERSON.**

To be sure we do not want to be without The Beekeepers Item in its new dress even if it was \$1.50 per year. So kindly mark us up in full for 1921. Wishing the Item and its staff all success for a bright 1921.
Barstow, Texas. **J. W. E. RASHAM...**

Enclosed find check for \$1.50 to pay for my subscription for 1920 and 1921. Excuse delay in remitting. I received the January copy of The Beekeepers Item in its new dress and I like it just fine. The size of the pages in the old dress was the only thing that did not just suit me. Since the pages have been changed to the new size it will be liked by everyone who sees it.
Pandora, Texas. **FRITZ BOHNE.**

I am sending check for \$2.00 to pay past dues on your splendid little journal.
Buffalo, Texas. **C. B. BANKSTON...**

Enclosed find Cashier's check for \$1.00 to extend my subscription to the Item. I like the new journal, and with best wishes for the new publication, I am.
Glennville, Georgia. **W. C. BARNARD.**

Enclosed please find one-fifty, fifty cents for last year's subscription and one dollar for 1921. We think the new Item is fine, worth the dollar you ask for it.
Roxton, Texas. **E. W. COTHRAN.**

Am enclosing check for amount due you. Many thanks for continuing to send my paper. I think the magazine form is much nicer. We enjoy the "Item" very much and find much interest as well as information. With best wishes, I am,
Moore, Texas. **B. F. CUDE.**

Enclosed please find one dollar to pay up my subscription to the Item for another year. My subscription expired with the February issue, and you have been kind enough to send it since then, and I am truly sorry I did not attend to it before. I like the Item very much in its new form and hope you have good success with it.

Again thanking you, I remain,
Shirland, Illinois. **FLOYD F. FISHER.**

Are you one of our subscription family?
Now is the time to join at only a dollar a year; or by some of the clubbing offers in this issue.

Enclosed find money order for \$2.50 for renewal to The Beekeepers Item and American Bee Journal, and fifty cents for Dr. Miller memorial fund. I know there is no beekeeper that thought more of Dr. Miller than I did.

I am well pleased with the change in the Item and think it will be worth the difference in price.

Things look good for a honey crop this year, horsemint is good and bees in fine shape.

Yours for better beekeeping,
Corsicana, Texas. **S. O. GORDON.**

Enclosed find 25 cents in stamps to cover my subscription to January 1st, 1922. I am glad to pay, as I am always glad to get my next copy of The Beekeepers Item.
Venus, Texas. **JEAN HORNBUCKLE.**

Please find enclosed P. O. Money Order for 50c for which extend my subscription to your valuable (little but loud) bee magazine to January 1922 and oblige. Bees swarmed very early here this season, some being caught the latter part of March.
LaGrange, Texas. **AUGUST HERMES.**

Enclosed please find my check for \$1.00 in renewal of my subscription for 1921. The Item in its new form shows a decided advance over last year.
Waldoboro, Maine. **JOHN C. LOVELL.**

I am enclosing \$1.00 to renew my subscription to The Beekeepers Item. It is real sprightly looking in its new dress and anyway I like it and want to associate with it another year.
Centerville, Texas. **W. W. LOWRANCE.**

I have received your February Number as a sample copy. You seem to have a real bee magazine and I enclose \$1.00 for subscription.

I would like to have the January number also so that I can keep the volume for binding.

Do not forget the March number which I suppose is also out.
Nemours, W. Va. **F. B. LAMBERT.**

Enclosed please find check for \$2.00 to cover subscription to your valuable paper for E. B. Ault and H. D. Murry.

We are much pleased with the new form of the paper and wish you much success with it. Don't see how Texas beekeepers ever got along without a paper of their own. Certainly we need it now, and The Item just fits the need.
Calallen, Texas. **NUECES COUNTY APIARI**

THE BEEKEEPERS ITEM :-: New Braunfels, Texas

Used Honey Cans

Good, used honey cans, clean and in good condition. We have some to offer, f. o. b. here, at \$1.00 per case of 2-60 lbs. cans. These will cost you much more new.

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SELECT QUEENS.

**Select Three Banded and
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Greatest Possible Care in Matings
Honest, Conscientious Testing.
Select Untested, Each----\$1.25
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Choice Breeders and also cheaper
Utility Queens priced on applica-
tion.

Geo. W. Coltrin & Son
Mathis, Texas.

BEEKEEPING IN THE SOUTH

The new 125 page bee book by Kenneth Hawkins, formerly extension agent in the South for the U. S. Department of Agriculture, now with the G. B. Lewis Company at Watertown, Wisconsin.

A clear concise explanation of beekeeping in the South well illustrated by many original photographs.

The book is cloth bound and printed on excellent paper.

Price of the book alone \$1.25, postage extra. (Mailing weight one pound.)

May be had in combination with a one year subscription to The American Bee Journal (new or renewal.)

Both for only \$2.50 postpaid.

Send orders to—

AMERICAN BEE JOURNAL, Hamilton, Ill.

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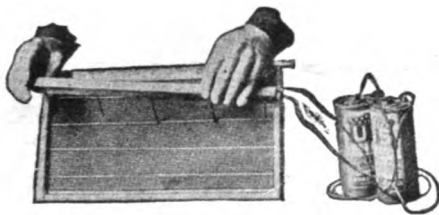
WE START SHIPPING MARCH 15th. ANY SIZE PACKAGE, WITH OR WITHOUT QUEENS. OVER 1,000 COLONIES FOR SHAKING.

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Price without batteries \$1.50, not postpaid

Actually cements wires in foundation. Will work with dry cells or with city current.

Best device of its kind on the market. For sale by all bee supply dealers.

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Assures Real Quality

Let us manufacture your Beeswax into "Superior" Foundation.

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THAT THE LEAHY MANUFACTURING COMPANY are manufacturers of the best Comb Foundation, Frames, Hives, and all Bee Keepers' Equipment, at the most reasonable prices? They do that very thing. And if you are in need, or will be soon, don't delay in sending your inquiry to LEAHY MANUFACTURING COMPANY, HIGGINSVILLE, MO. A. M. HUNT, GOLDTHWAITE, MILLS COUNTY, TEXAS. Prompt shipments and highest quality supplies.

WE CLUB WITH OTHERS

So frequent are the inquiries for clubbing rates with other bee journals that we have again decided to offer these and accomodate our subscribers.

Our Special Clubbing Offers

Any of these will save you money and furnish excellent reading:

American Bee Journal, a year.....\$1.50	Western Honey Bee, a year.....\$1.00
With the Beekeepers Item, both....\$2.00	With The Beekeepers Item, both...\$1.75
Gleanings in Bee Culture, a year....\$1.00	Domestic Beekeeper, a year.....\$1.50
With The Beekeepers Item, both....\$1.90	With The Beekeepers Item, both...\$2.00
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The Beekeepers Item

New Braunfels,

.

Texas

BECAUSE IT LASTS

That is One Argument in Favor of Cypress as a Beekeeper's Lumber.



There are many qualities that make the value in lumber, depending, of course, on the uses to which they are put. But of all virtues that of *endurance* comes first. The wood that resists rot influences longest, especially when

the wood is used in a service by which it is exposed to wet and dry conditions and earth contact—that wood is accredited with being able to give the user the greatest INVESTMENT VALUE.

No use tries the lasting qualities of lumber greater than that of Bee Hive construction. It is the very deuce to get lumber that will not too readily rot—unless one gets Cypress lumber. Then there is a good show for endurance that means *real money saved on Repairs You Don't Have to Make*. Try it, Mr. Beekeeper.

STUDY THE WOOD QUESTION

There's one way to get at this matter of endurance—through books of authority. Such are the 43 volumes of the internationally famous Cypress Pocket Library. These books are not "advertising"—they are authoritative references on file in the libraries of scores of technical schools and National institutes. Ask for Vol. 1 to start with; it contains the complete U. S. Govt. Rept. on Cypress, "The Wood Eternal," and a full list of the other volumes; then branch out until you cover the subject.

SOUTHERN CYPRESS MANUFACTURERS ASS'N.

1277 Graham Building, Jacksonville, Fla.

1277 Perdido Street, New Orleans, La.

FOR QUICK SERVICE, ADDRESS NEAREST POST OFFICE

The New Price Is Now \$1.00 A Year

In 1916 this publication was founded as a mere eight page "newspaper" for beekeepers. From this small beginning it has grown in size and improved in appearance and increased in circulation to such an extent that it has outgrown its former sphere. It has now reached a period of its established and useful life that warranted making a change in style and price.

Is Now in Magazine Form

With the ever-increasing popularity won by this publication there has developed a demand for a smaller size, more easily adapted for binding into complete volumes. It is an appreciated fact that beekeepers, more than those in most other professions, preserve their copies for future reference. We are, therefore, pleased to publish a new size, of 32 pages, for the new year.

The Price Will Still Be Low

Considering the high cost of almost everything, the new subscription price will still be a moderate one. Paper, ink and all printing materials, labor and postage and all other expenses have increased to such an extent since we first issued our little eight page paper for 50 cents a year, that we are compelled to advance the subscription price to \$1.00 per annum; not for the same but a better beekeeping publication.

Send in Your Subscription Now

You will not want to miss a single issue as this publication will be better than ever before. There will be a number of special issues on important beekeeping subjects throughout the year, as well as much other information. By sending your subscription now your name will be enrolled without delay.

Our Special Clubbing Offers

Any of these will save you money and furnish excellent reading:

American Bee Journal, a year.....\$1.50	Western Honey Bee, a year.....\$1.00
With the Beekeepers Item, both.....\$2.00	With The Beekeepers Item, both....\$1.75
Gleanings in Bee Culture, a year...\$1.00	Domestic Beekeeper, a year.....\$1.50
With The Beekeepers Item, both...\$1.90	With The Beekeepers Item, both...\$2.00

Send all orders too:

The Beekeepers Item

New Braunfels,

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Texas

Beekeepers' Supplies

We manufacture and have ready for immediate shipment, hives, frames, foundation and all supplies for the bee keeper.

Langstroth brood frames,
per 100 ----- \$5.00
Langstroth super frames,
per 100 ----- \$4.00

Catalogue and Price List for 1921
now ready.

Write Today

GRAHAM MFG. CO.
GREENVILLE, TEXAS.

STANDARD PRINTING COMPANY

(Successors to Wilson-Schwegmann)

Printers, Blank-Book Manufacturers
English, German, Spanish

We Print The Texas Honey Producers Association Special Letter Heads for Members.

Also Other Stationery.

206 Navarro Street, San Antonio, Texas



Attention: Texas Beekeepers

Do you know Carl F. Buck of Augusta, Kansas, makes the very best Weed Process Comb Foundation in the country? And the freight to his factory is less And his price for working wax and selling foundation are very low? And he pays the best prices for beeswax. Write him. His address is

CARL F. BUCK

Established 1889. AUGUSTA, KANSAS.

W. Odell Learn & Co.

500 Dolorosa Street, San Antonio, Texas.
Buy All Kinds to

LIVE SNAKES AND ANIMALS.
BEST PRICES PAID.

WALL PAPER, WINDOW GLASS

Harrison's Town and Country
Paint, Artists' Material

Let us figure on your needs of Bee Hive and
Other Painting.

Prompt attention to out-of-town orders.

FRED HUMMERT

204-6-8 W. Commerce St.

San Antonio, - - - - - Texas

FERD STAFFEL

ESTABLISHED 1890

San Antonio's Largest Seed, Feed and
Poultry Supply House

Queen's and Cypher's
Incubators,
Brooders and Hovers.

Write Us for Prices

Main Store, 321 E. Commerce St.

SAN ANTONIO, - - - - - TEXAS

For Beekeeping Farmers!

The Blumberg Motor Manufacturing Co. is now taking orders for Tractors for delivery in 60 days.

If you are in the market for a Farm Tractor and want the best, place your order now for future delivery.

Blumberg Steady Pull Tractors

are manufactured in San Antonio, and
for four years have given satisfaction
to owners.

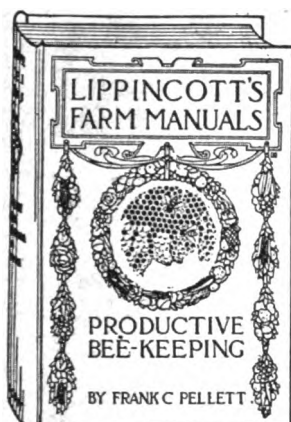


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Blumberg Motor Mfg. Co.

Mesquite and Burnett Streets

SAN ANTONIO, TEXAS



"PRODUCTIVE BEEKEEPING"

By Frank C. Pellett

One of Lippincott's "Farm Manual" Series, this book of 326 pages is finely gotten up, finely bound, and has 134 illustrations, nearly all original with the author. Price \$2.50

READ THE CONTENTS BELOW:

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| 1. Beekeeping a Fascinating Pursuit | 8. Feeding |
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| 3. Making a Start With Bees | 10. Production of Extracted Honey |
| 4. Arrangement of the Apiary | 11. Wax—A By-Product of the Apiary |
| 5. Sources of Nectar | 12. Diseases and Enemies of Bees |
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| 7. Increase | 14. Marketing the Honey Crop |
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Send All Orders to The Beekeepers Item, New Braunfels, Tex.

Are You Interested in Farming?

You will want to read the farm paper published by the editor of your bee paper. You will find it an excellent medium on agricultural affairs.

Scholl's Monthly Farmer

LOUIS H. SCHOLL, Editor

It is a farm and home paper, of interest to every member of the family, in country or town. It has departments on the household, boys and girls, bees, poultry and fruit etc. You will appreciate it.

Subscription price only 50 cents a year. With THE BEEKEEPERS' ITEM \$1.25 a year.

Scholl's Monthly Farmer, New Braunfels, Texas

WILL SELL AT WHOLESALE



A Big Stock of Bee Supplies

ALL BOXED, ready to ship at once—thousands of Hoffman Frames; also Jumbo and Shallow Frames of all kinds—100 and 200 in a box. Big stock of Sections and fine polished Dovetailed Hives and Supers. Send for a price list. I can save you money.

Will take your Beeswax in Trade at Highest Market Price.

CHAS. MONDENG

159 Cedar Lake Road

MINNEAPOLIS, MINN.

Pellett's Practical Queen - Rearing

BY FRANK C. PELLETT

To get the best honey yields it is necessary to have good queens in your colonies. No matter how good your ability to care for the bees, how well adapted your hives, nor whether the honey flow may be abundant, the colonies will not give best results unless they are in first-class condition and strong in number of bees. This will depend upon the kind of a queen in the hive.

This new work on queen rearing methods should be in the hands of every beekeeper whether he owns a few or many colonies.

All the leading practical queen rearing methods are discussed in a plain manner so every reader can understand them. The book is worth many times its price.

You Need A Copy -- Order It To-Day

Arrangements have been made whereby a copy can be obtained with a club subscription to this publication. Price \$1.00, with The Beekeepers Item, the year, both \$1.75.

SEND ORDERS TO

The Beekeeper's Item

New Braunfels, Texas

Southern Beekeepers Buy in the South

SOUTHLAND GOODS ARE GUARANTEED TO YOU
GET SOUTHLAND QUALITY AND SERVICE

Airco Fundation 82c lb., 100 lb. lots.....	\$.70
Hoffman frames (Root), crate of 100.....	6.75
10 frames, per 100	6.25
100 or more crates of 100 each.....	5.70
16 oz. jars, 24 to re-shipping case	1.60
100 or more cases, each.....	1.45

Honey Cans---All New

2-5 gal., 60-lb. 1 3-4 cap, case of two.....	\$ 1.40
100 or more cases, per case.....	1.25
Special price on larger quantities or carlots.	
100 5-lb. cans to crate.....	7.75
200 5-lb. cans to crate.....	15.25
5-lb. cans per M.....	75.00
100 10-lb. cans to crate.....	11.75
10-lb. cans, per M.....	116.00

Square Cornered Oblong Honey Cans

A FANCY PACKAGE. THE MOST ATTRACTIVE TIN IN WHICH TO
PACK YOUR HONEY

¼ gal. oblong cans, 3-lb., soldered seams, screw top, seals and gaskets, per hundred	13.00
½ gals. oblong cans, per hundred.....	15.50

Hives---The Best Made

BETTER PRICES FOR THE SOUTHERN BEEKEEPER

Root, 10-fr., Crate of five, metal cover, complete, K. D.....	\$15.00
100 or more crates of five, K. D. as above.....	16.26
Root bee shipping cages, and queen cages, at discount of.....	35%

Cypress Goods

Offer a limited quantity of 10-fr. cypress hives at the following:

Cypress hives, 10-fr., one piece cover complete, crate of five, K. D.....	13.00
100 or more crates of five, K. D., per ccrate.....	13.00

Write for Our Catalogue

QUICK SERVICE—PROMPT SHIPMENT. SATISFACTION
GUARANTEED. SPECIAL PRICES YOUR LARGER ORDERS.
DISCOUNT FOR YOUR YEARS BUSINESS. IT WILL PAY
YOU TO WRITE US.

OUR MOTTO:—LARGE VOLUME. SMALL PROFIT:

THE SOUTHLAND APIARIES

Box 585

Hattiesburg, Miss.

Highest Quality of Italian Queens

3 BANDED QUEENS

GOLDEN QUEENS

Twenty Five Years of Select Breeding From the Best

After 25 years of select breeding, not all of the time in a commercial way, but as large honey producers, therefore breeding or rearing a great many queens for our own use, we have a strain of pure Italian bees which we believe are unexcelled for gentleness, disease resisting qualities and honey production. Having about 1500 colonies of bees which we run for honey production gives us ample opportunity to test them out in every way. As our apiary interests extend as far north as Northern Ontario we have a chance to test in person our strain from a climatic stand point. We find our bees stand the long northern winters with very satisfactory results. They are very hardy and long lived.

WHAT OTHERS SAY ABOUT THEM

M. C. Berry & Co., Hayneville, Ala.

I wish to inform you that one of your queens made the most honey of any in the yard. It made 250 lbs. of extracty honey All of your queens made good. I never have against an average of 103 lbs. for the yard. had a queen from you that did not pay a big percent on the investment.

(Name on request.) Marion, Indiana.

M. C. Berry & Co., Hayneville, Ala.

The introduction of your queens in six colonies of bees that had European Foul Brood cleaned up the disease.

(Name on request.) Pine Ridge, N. Y.
M. C. Berry & Co., Hayneville, Ala.

I am pleased to say that your queens have given me every satisfaction in every way.

(Name on request.) Toronto, Ont., Canada.

Untested, -----	\$1.50 each;	6 to 50	\$1.25 each	50 to 100 and up	\$1.00 each
Select Untested -----	1.75 each;	6 to 50	1.50 each	50 to 100 and up	\$1.25 each
Tested -----	2.25 each;	6 to 50	2.10 each	50 to 100 and up	\$2.00 each
Select Tested -----	3.00 each;	6 to 50	2.75 each	50 to 100 and up	\$2.50 each

Prompt delivery, safe arrival and satisfaction guaranteed. Wings clipped free of charge.

M. C. BERRY & CO., HAYNEVILLE, ALABAMA, U. S. A.

Burleson's Queens

SOME AS GOOD—NONE BETTER

Being a believer in and a user of some 2,000 queens annually, and being unable to secure enough queens that will stand the test, I have decided to rear them myself. My queen yards are located at Mathis, Texas, near Corpus Christi, Texas.

Only selected queens will be sent out.

Prices of Queens	1	6	12	100
Select—Untested -----	\$1.50	\$8.00	\$15.00	\$100.00
Select—Tested -----	3.00	16.00	30.00	

T. W. Burleson, Waxahachie, Texas

Address all orders to J. W. Seay, Mgr., Mathis, Texas

REVISED HONEY CAN PRICE LIST

GUARANTEED NET WEIGHT CANS

	1 to 50 cases	50 to 200 cases	200 cases up
6-10	\$1.20	\$1.15	\$1.10
12-5	1.40	1.35	1.30
20-3	1.55	1.50	1.45
2-60-1¾ in.	1.50	1.45	1.40

1,000 cases old style standard 20-3 at \$1.25 per case while they last.

The A. I. ROOT COMPANY of Texas

For Service and Quality Address

BOX 765 . . . San Antonio, Texas

AS AN ADVERTISING MEDIUM

“Does it pay to advertise in this publication?” is probably the first question that comes to the mind of the prospective advertiser. While our own experience in using our columns for advertising has given excellent results as a business getter, our customers, with *very* few exceptions indeed, have had no hesitancy in letting us know how well *satisfied* they were. We could fill several pages with letters from them, but here is one that is to the point:

The Beekeepers' Item,
New Braunfels, Texas.

Castroville, Texas, April 20, 1921.

Dear Sirs:

Supplementary to my letter of yesterday, I wish you to add the following to my advertisement, after “Breeders”: “Orders will be filled in rotation.” Mr. Brenner objects to shipping any breeding queen before thoroughly tested. Every one I had is gone. Today I had to return orders for breeding queens and asked the parties if they would wait in rotation, like the rest already booked.

As my advertisements in the northern papers have not yet appeared, I have to thank “The Beekeepers Item” for the orders I had so far. I am sorry I sent advertisements to the northern papers. I could have saved my money. “The Beekeepers' Item” is sufficient.

Yours truly,

Mrs. J. T. FitzSimon.

If it pays others to advertise in our columns then it ought to pay you. Give us a trial.

For rates and other information write

The Beekeepers Item, New Braunfels, Texas

Three Banded Italians

Booking Orders now For 1922

Will book orders for one-fourth cash, balance before delivery.

Will guarantee safe arrival in the United States and Canada.

QUEENS READY APRIL 1.

Prices for April, May and June

Untested \$1.25 each; 25 or more, \$1.00 each.

Select untested \$1.50 each; 25 or more \$1.25 each .

Tested \$2.50 each; 24 or more \$2.25 each.

Select Tested Queens, \$3 each
Circular Free

JOHN G. MILLER

723 C. St. CORPUS CHRISTI,
TEXAS

PACKAGE BEES

NUCLEI OUR SPECIALTY

Three Banded Italian Queens

Our BEES and our EXPERIENCE will give you prompt and satisfactory service.

One 2-frame nuclei, no queen, \$4; 25 or more, \$3.75; 50 or more, \$3.50; 100 or more, \$3.25.

One 3-frame nuclei, no queen, \$6; 25 or more, \$5.25; 50 or more, \$5; 100 or more, \$4.75.

Queens: One untested, \$1.50; 6, \$8; 12, \$15; 50, \$60; 100, \$100. Tested queens, \$2.50 each.

Package bees same price as nuclei. Write for early order discounts from above prices and our guarantee on shipments. We will surprise you.

COTTON BELT APIARIES
Roxton, Texas

Patterson & Winters' Queens

Early Order Discounts for 1922 on Queens and Package Bees

Orders received during December 1921,	8 per cent
Orders received during January, 1922	6 per cent
Orders received during February, 1922	4 per cent
Orders received during March, 1922	2 per cent

One fourth cash with order, balance before shipment.

QUEENS

1 untested queen \$1.25; 25 or more	\$1.00
1 tested queen 2.50; 25 or more	2.25
1 select tested queen, \$3.00; 25 or more	2.50

NUCLEI

Two comb regular nuclei	\$3.60	Twenty-five or more	\$3.45
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PACKAGES

One 2-pound package, \$3.60; 25 or more, \$3.45
One 3-pound package, \$5.00; 25 or more, \$4.75

Add price of queen wanted when ordering above packages

REFERENCES: Adams National Bank, Devine, Texas; Atascosa State Bank, Jourdanton, Texas.

PATTERSON & WINTERS

Jourdanton

Texas

Burleson's Old Reliable Three-Banded Italian Queens

—NONE BETTER

Not as cheap as some but worth the difference. NONE BETTER

I guarantee them to be absolutely free from brood diseases.

THESE ARE MY 1922 PRICES:

Untested	\$1.25 each	\$13.50 per doz., 25 or more	\$1.00 each
Select Untested.....	1.50 each	\$15.00 per doz., 25 or more	\$1.25 each
	Select tested	3.00 each	

Considering the high quality of my queens combined with service and reliability justifies the above prices

SEND ALL ORDERS TOGETHER WITH REMITTANCE TO

J. W. SEAY, Mgr., MATHIS, TEXAS

T. W. BURLESON

WAXAHACHIE, TEXAS

EAGLE "MIKADO"



PENCIL No. 174



For Sale at Your Dealers

Made in Five Grades

ASK FOR THE YELLOW PENCIL WITH THE RED BAND

EAGLE MIKADO

EAGLE PENCIL COMPANY

NEW YORK

Thagard's Italian Queens

"BRED FOR QUALITY"

They are more than just ordinary queens, they are bred from one of the foremost strains of queens from Italy, and our own famous train mated to our domestic drones. They are hardy, prolific, disease-resisting and honey producers. Place our queens against any you may obtain anywhere, AND NOTE THE RESULTS. Safe arrival, pure mating, and perfect satisfaction guaranteed. Write for descriptive catalogue.

Untested.....	1.50;	Six \$7.50;	Twelve \$13.50
Select Untested.....	1.75;	Six 9.00;	Twelve 16.00
Tested.....	2.50;	Six 13.00;	Twelve 24.00
Select Tested.....	4.00;	Six 22.00;	Twelve 41.50
One pound package	\$3.50	25 or more	\$2.75
Two pound package	5.00	25 or more	4.50

BLACK AND HYBRID BEES

One pound package	\$2.00,	25 or more	\$1.90
Two pound package	4.00,	25 or more	3.50

Add price of queen wanted.

10 per cent for cash with order.

THE V. R. THAGARD CO.

GREENVILLE,

ALABAMA

THE BEEKEEPER'S ITEM FOR 1922

In the late fall of 1916 this publication was founded as a mere eight page "newspaper" for beekeepers, especially in the southern part of the country, where it was felt that a medium of exchange that would touch more on the subjects of beekeeping that were applicable there. From this small beginning it grew in size and improved in appearance, and rapidly increased in circulation to such an extent that it soon out-grew its former sphere.

Then Changed to Magazine Form

With the ever-increasing number of subscribers and greater popularity there developed a demand for a smaller size of the form of the publication, one more easily adapted for binding into complete volumes. Beekeepers, more than those in most other professions, preserve their copies for future reference. So the "newspaper" form was changed to the present magazine size with the January 1921 number.

Our Journal Has Been Appreciated

Hundreds of letters from all parts of the country, including every State in the Union, Canada, Mexico, and Eighteen foreign countries, unsolicited, voiced appreciation of our journal, not only on its new form but on account of the practical, real, live-wire publication it was to them. It is needless to say that those who have had to do with getting out this journal, from the editor to the department editors and contributors, likewise appreciated these words of praise.

It Will Be Made Still Better

The encouragement received from all sides urged every one connected with the making of this journal to constantly help to make it still better. If you have occasion to do so, kindly compare our present numbers with those of only a year ago, and then with a copy of our first year's issue. And we are not going to stop here. Other plans have already been made for a number of improvements for the coming year. There will be more illustrated special articles, more strong editorials, more of real beekeeping experience, and more about crop and market conditions.

You Will Not Want to Miss an Issue

In order that you may get all that the volume for 1922 will have in store you will not want to miss a single one of the numbers. Therefore you will want to send your subscription, or renewal, if you are already one of our large family of readers, as early as possible. You will certainly want the January number to begin with. While we will print an extra number of this issue because we always have requests for the back numbers during the fore part of the year, the supply may not last. For this reason it will be well to send your subscription promptly, either alone or with some of the clubbing offers found on some of the pages of this issue.

Send your orders and make remittances to

THE BEEKEEPER'S ITEM
NEW BAUNFELS, TEXAS

Annual White Sweet Clover Seed

(James or Alabama Strain)

Start right. Buy your seed from the home of this new plant.

This clover was discovered growing in Alabama by our Mr. James, in 1919.

We are offering a limited supply at \$2.00 per pound, delivered. This will be clean, hulled, scarified seed. Germination test must please you. Write for further information as to how to grow, etc.

F. A. James Clover Seed Co.,
NEWBERN, ALABAMA

SANCO BEES

Three Banded Leather Colored Italians that stand the winter best of any known. Repeat Orders Mean Satisfied Customers.

Let us book your order now for a good shipping date. 1922 PRICES

2-frame Nuclei with Queen \$4.50 each.

3-frame Nuclei with Queen, \$5.50 each

Terms 25 per cent with order, balance 15 days before shipping date.

Be a "SANCO Satisfied Customer"

If once a buyer, you'll always be a customer Safe arrival guaranteed in U. S. and Canada

SANCO BEE COMPANY

J. B. Sanderson, Prop. Frederickburg, Ohio

Package Bees

THREE BAND AND GOLDEN QUEENS

- 1 Untested Queen -----\$1.00
- 1 Tested Queen -----\$1.50
- Bees, per lb. -----\$2.00

Write for Price List

NO BEE DISEASES

Indianola Apiary

VALDOSTA, GEORGIA

Business First Queens

The queen you sent me was extra high grade. I am truly pleased. She does not stop laying when the frame that she is on is taken out. This is due to her being of very quiet disposition and extra prolific. I have seen the time back North when I would have paid \$25.00 cash for such a queen. Very truly, Geo. W. Fuller, Auburndale, Fla.

Select untested \$1.50 Tested \$2.50 each

Absolutely no disease. Prompt attention, safe arrival and satisfaction guaranteed in the United States. Orders will be filled in rotation.

REFERENCE: Bradentown Bank & Trust Co.

M. Perry, Bradentown, Fla.

Latham's Queen's Suit Other People Besides Latham

"The 40 queens arrived in fine conditions. All beauties."

"Those queens you sent me beat anything I ever saw. My hives are full of bees."

"I am delighted with the queen you sent me."

"The queen I received from you has the greatest amount of brood of any queen in my yard, and I have queens from nine different breeders."

"The 25 queens received July 1 are certainly fine."

"We are delighted with the quality of stock you sent us." (100 queens went here.)

"The queen you sent me is a prize. I introduced her into one of my weakest colonies, and now she is laying in 20 combs. Nothing weak about that colony now."

"Your queens have been highly satisfactory in the past so you see I am coming again. 'She-suits-me'."

She-Suits-Me Queens Are Line-Bred Italians

Vigorous, prolific, and throwing workers that are snappy and hustling, they meet the need of the practical beekeeper. They are dependable, and their presence in your hives means profit to you.

PRICES—Untested, from May 15 to June 15, \$2.00 per queen. If 10 or more go in one order, \$1.75 per queen. After June 15 and until November from 1 to 9, \$1.50 per queen; from 10 to 24, \$1.30 per queen; from 25 to 40, \$1.25 per queen. 100 queen \$115. Tested queens, \$3.00 thruout the season.

DISCOUNT—Upon all orders received prior to April 1, 1922, a discount of 20 per cent will apply.

TERMS—10 per cent of price must accompany order to insure booking and discount, and the remainder must be remitted before queens are mailed.

Send for price list of queens, packages and nuclei. Packages for New England States a specialty

Norwichtown

ALLEN LATHAM

Connecticut

Fifty full colonies and 700 nuclei devoted exclusively to my queen business

What Dadant's Foundation Means

Based on actual tests in our own apiaries of many hundred colonies, we have always aimed to stress those qualities in DADANT'S FOUNDATION which made for a better acceptance by the bees, better drawn combs and more satisfaction for the beekeeper.

THAT IS WHY, over FORTY YEARS AGO, when we discovered the injurious effect of acids on beeswax, we revolutionized our methods of manufacture. DADANT'S FOUNDATION has always meant to the beekeeper, the very best.

AND THAT IS WHY (through constant improvement), DADANT'S FOUNDATION still tops the heap for real quality.

Every effort made, every experiment tried and every new kink in manufacture added, gives to our bees and later to yours, every advantage in combs and comb building.

Thousands of satisfied users will testify as to the results.

Dadant's Foundation Every inch, every pound, every ton equal to any sample we have ever sent out.

Specify it to your dealer. If he hasn't it write us.

DADANT & SONS Hamilton, Illinois

Catalog and Prices on Bee Supplies, Beeswax, Wax Working into Comb Foundation and Comb Rendering for the Asking.

**Texas Honey Producers Association, San Antonio, Texas,
Agents for Texas---Send your orders to them.**

THE BEEKEEPERS ITEM

A SMALL ITEM IN ITSELF, A BIG ITEM FOR BEEKEEPERS.

Entered in the Postoffice at New Braunfels, Texas, as Second-Class Matter.

Louis H. Scholl, Editor.

One Dollar Per Year

VOLUME 5

NEW BRAUNFELS, TEXAS, OCTOBER, 1921

NUMBER 10

Swarm Control With Eight Frame Hives

Pioneer Who Began with Eight Frame Hives, But Now Uses the Ten Frame Size
Also, With a Preference for Still Larger Hives, Presents a Simple Method
of Manipulation for Swarm Control that is Easily Employed

L. B. Smith

THE HIVE QUESTION has been discussed so much that there ought to be very little room for further argument. However, one discussion brings on another and this is true in our case. In a previous issue of this journal appeared an article by the writer in part outlining our success in beekeeping with the eight frame hive. The readers will remember the

ten frame hives, if not more, than of the eight frame size. Bad beekeeping, perhaps. Yes, it is not orthodox to have two sizes of hives in the same apiary, neither is it a good idea, but we have them just the same. However, we have not bought an eight frame hive direct from the factory for twenty years since the ten frame size is our preference. I am not sure



One of the Out Apiaries Where Swarming is Controlled with Eight Frame Hives

illustration of one of our apiaries showing the hives and their arrangement and the kind of location. The general impression that the reader must have gathered, both from the article itself and from the pictures, is that all of the hives were eight frame. A close look at the pictures, and also those shown here, will show, however, that not all the hives we use are eight frame. The fact is that we have as many

but I would like the large Dadant or even the Jumbo hive better than either of the eight or ten frame. But the average apiarist, as a rule, can not afford to throw away good, eight frame hives just to adopt some other, especially since both hives and paint are so high in price. That is the reason why we have both sizes of hives in most all of our apiaries. It is almost impossible to keep all the eight frame equipment in

ganism. In this sense honey is undoubtedly the oldest food as bees stored honey long before man began to think of preparing food. In this way it is surely the oldest food and there is not one but will say that it is still the best. A small reproduction of this advertisement is presented on the next page of this issue.

The advertisement next to it was shown in the October number, and has for its title, "Honey, the Healthful Sweet for Youngsters." An attractive table, with bread and honey, ready for the hungry kiddies returning from school, was shown. In the first one both comb and extracted honey appeared. In the second, extracted honey in a glass jar holds the main place, and the use of honey as a spread for bread, crackers, cakes, waffles, hot cakes and biscuits is emphasized.

As few people know that honey can be used in other ways than as a spread, the honey booklet itself was described in the November number of that magazine as shown in the illustration in the forepart of this article. Honey in cookies, pies, puddings, cake frosting, candies, jellies, in fact, that honey in all cooking adds much to its flavor and keeping qualities.

The advertising appeared and the demand came. The publications of the Bureau of Markets, U. S. Dept. of Agriculture, and a number of the commercial trade journals were positive in their statements that the League campaign was responsible for the increased demand for honey. Due credit must be given to the aid rendered in securing this demand by the advertising of private firms and some of the larger state associations. The campaign has been a success if one can judge by the requests that have been made for the booklets. Requests have come from every state in the Union and Canada; from as far north as Alaska, New Foundland and Scotland; east to Athens, Greece; south to Peru; and west to China. Africa and Australia are also represented. Of the states, California, Wisconsin, New York, and Pennsylvania, stand about even in the number of requests sent.

Contrary to the expectation of many, few requests for honey prices came to the secretary. This was due to the fact that the advertisements made it clear that the League was a corporation similar to the many others advertising fruits, cereals and other products which are sold only through stores. The few requests that

were received were at once forwarded to the affiliated association nearest the sender. The secretary will, in the near future, send to each affiliated body of the League, the names and addresses of all who have received the booklet in their trade territory.

Knowing that merchants would like to use copies of the booklet, the advertising committee arranged to sell these to anyone desiring to distribute them. This offer has been taken advantage of by many. One large honey dealer has distributed at his expense over 5600 copies. Lots of from 50 to 500 copies have been sent to almost every state, and two sets into Canada. As nearly as can be estimated, about 40,000 copies have now been distributed.

The booklets have been appreciated and many have written congratulating the League on them. Large numbers of domestic science teachers have procured them for class work. Such magazines as "Class," and "Printers Ink," have taken notice of the activities of the League in advertising. One of the best compliments paid the booklet is that one of the large newspaper syndicates offers to distribute 100,000 copies of it free of any charge to the League.

While the advertisements were appearing, and since, the secretary and other members supplied a large number of reading articles on bees, bee culture, and honey, to over fifty magazines and journals other than newspapers. Many short articles of general news of this kind came out in the newspapers and farm weeklies. If requests for booklets and a general demand for honey are indicators of the work of this advertising campaign, then it has been a huge success.

At the second annual meeting of the League, which will be held at Salt Lake City, Utah, January 30-31, 1922, it is planned to arrange for a second and more extensive campaign. With bright prospects for a good year ahead of us, and advertising before the public assuring a quick demand and fair price for honey, the beekeeper can with surity prepare for his best year's work.

San Antonio, Texas.

There is room for more beekeepers, of the kind that are progressive enough to undertake it in a real, business-like way. Building up the industry in this way will make it substantial, sound and safe.

MARKETING HONEY BY PRODUCERS

GEORGE W. YORK

As one of your subscribers I surely was much interested in reading the September issue of the Beekeepers Item, and especially the article by W. E. Joor, on "How Honey Should Be Sold." He certainly has the right idea of the subject, and more honey-producers should see as straight as he does.

It seems to me here is a field that the American Honey Producers League could very well get busy in. I mean getting after the large commercial honey-producers who are selling their crop at wholesale prices direct to con-

sumers at 8 1-3 cents a pound in sixty pound cans? Is it possible that there are any commercial beekeepers who do not know that it costs more than those prices to produce good honey, one year with another? And do they not know that there is no good reason why honey should be sold at such ridiculously low prices, when its food value is far higher than that of many other foods which find their way to the tables of the consuming public?

Had certain producers been just a little business-like, there would be no need of a ten pound pail of the best grade of table honey being sold here in Spokane for less than \$2.00 at retail. As it is, just yesterday a certain

Honey!
The OLDEST FOOD
and STILL THE BEST

WHENEVER you want a light, nourishing, quickly-prepared lunch—serve honey. For a combination of food value, healthful qualities and delicious taste, this "gift of the bees" is unsurpassed. Everybody likes honey. Give it to the kiddie—it is the most wholesome sweet they can eat. Keep honey in the house at all times. Serve it with hot breads, waffles, crackers and cakes.

On sale at all first-class grocers and delicatessen stores.

We have just compiled a booklet giving many new recipes for delicious puddings, cakes, table fillings and frostings, cookies, candies, etc. It also shows the correct method of serving honey for all purposes.

Write for your free copy to Secretary,
AMERICAN HONEY PRODUCERS LEAGUE
A non-profit, national organization of honey producers.
SAN ANTONIO, TEXAS

Honey
The HEALTHFUL SWEET FOR YOUNGSTERS

HONEY satisfies the "sweet tooth" of the children—and it also gives them real, nourishing, body-building food. Keep it in the house at all times. Let them eat it freely at every meal—and any other time they are hungry or want "something good." Serve it with crackers, cakes, bread, waffles, hot cakes, biscuits, etc.

And, of course, honey is just as healthful and delicious for grown-ups as it is for children. You cannot buy a more nourishing food—you cannot conceive of a more delicious sweet. On sale at all first-class grocery and delicatessen stores.

Honey Recipe Book Free
Contains many new recipes for cakes, puddings, frostings, breads, fillings and frostings, cookies, candies, etc. Also shows the correct method of serving honey for all purposes, and tells how to keep honey.

Write for your free copy to Secretary,
American Honey Producers' League
A non-profit, national organization of honey producers.
SAN ANTONIO, TEXAS

The Quarter Page Advertisements Appearing in September and October Good Housekeeping

sumers. They do not seem to realize that by so doing they are simply lowering the price of honey, and that when some of the leading beekeepers do that, there are other producers who are going to cut the price still lower, and so it will go until the prices of the best table honies will be even lower than they were before the world war.

Will any one tell me why the best grades of alfalfa and sweet clover honey should be wholesaled at 7 to 8 cents per pound, and direct to

retail dealer began selling ten pound pails of white honey at \$1.35 each! And a number have been selling at \$1.40 for a ten pound pail.

Now, the ten pound empty pail costs 15 cents, and the freight on this \$1.35 pail of honey was another 15 cents, making 30 cents, which would leave \$1.05 for the honey.

Out of this must come the retailer's profit and the cost of the honey to him. So what did the producer get for it, over 600 miles away from Spokane? Besides, this dealer had an ad-

vertisement in the local daily newspaper that must have cost him not less than \$6.00, in which it was stated that there were something over 100 pails of this honey to be sold at the \$1.35 price.

I hope such matters will be taken up by the American Honey Producers League at its next meeting, when it convenes in Salt Lake City, on Jan. 30 and 31, 1922. Unless the producers and dealers get a fair profit from producing and handling honey, it will not be long until beekeeping will be dropped for something more profitable, or something at which a man who is willing to work can make an honest living. And if such should eventually be the case, the large or commercial honey-producers will have only themselves to blame for it. Those who engage in this kind of business will have to bear the blame for unbusiness-like methods of selling honey too low. The other class of large producers for permitting this thing to go on. Only a great, united, co-operative campaign will prevent it. If the large producers can be kept in line most of the less extensive beekeepers will follow, while the remaining ones will not figure as largely in the market price. Spokane, Washington.

CAN SELL MORE HONEY EASILY

CLIFFORD F. MUTH

We do not believe honey receives the attention of the wholesale grocers to which such a merited food is entitled.

Twenty-five years ago, when the writer was just contemplating going into business, he asked a number of wholesale grocer friends what they thought of the idea, and their expressions were: "Don't do it; get in any line but honey." Others said: "We sell only a few dozen jars a month." And still others said: "Manufacture gold bricks; you will sell more of them." On the whole there was not one who encouraged undertaking the packing of honey as a business; they could not see or understand that the American people are consuming more honey each year.

Very recently the large producers and packers of honey organized into an association called "The American Honey Producers' League." They raised funds for a national advertising campaign which began with the September

issue of *The Good Housekeeping* magazine (page 141). One of their best ideas is getting out a free recipe book on honey to interested housewives, showing the many uses of honey for table and cooking. This brings another side of the honey game to light.

Heretofore most of the honey was sold in small glass packages, which added to the cost to consumer and put honey in what you might call a luxury class. Now the conditions are changing slowly but surely. The housewife, since finding out the food value and cooking results of honey, demands a larger size at lower cost per pound. We predict that within the very near future large quantities of honey will be sold in five and ten pound pails. However, the tumblers and jars will continue to sell to those who prefer small purchases.

There is one season of the year when honey sells the best, and if the wholesale grocer takes advantage of the psychological moment and pushes it at that time he will receive pleasing results. That season is from October 1 to April 15. This is when we all have hot biscuits and honey for breakfast; flapjacks, too, to our heart's content.

Do not expect your customer to beg you to handle honey, or even ask if you have it in stock. Buy before the opening of the season and tell your customers about it, just as you do your first shipment of pancake flour.

Window displays of live bees in some of the leading retail groceries will be appreciated by the retail grocer and attract wide attention. These observation hives can usually be furnished by the honey packers. We in Cincinnati pick out three leading retail grocers in different parts of the city and display them for six or seven days, after which time the bees are moved to another section, etc. The inducement for the bees is larger sales, not only in honey but in other lines as well, for they attract the passerby. The purchase of five or ten cases of honey must be made to stimulate the retail grocer taking advantage of a good thing.

Honey is a profitable food for the wholesale grocer to handle. If it were not so we, as packers, would not be in the business very long. With the growing demand for honey we are positive that wholesale grocers will be well benefited if they will give more attention to this article than heretofore.—The Wholesale Grocer, Chicago, Ill.

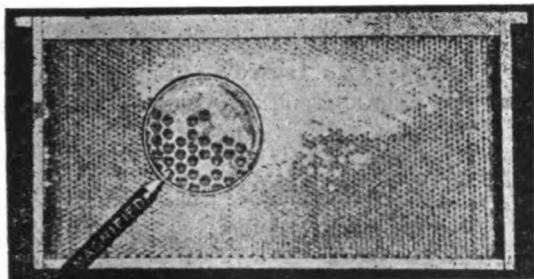
TWO YEARS WITH ALUMINUM COMBS

MADISON C. STEARNS

Having been so interested in reading the accounts of the experiences of users of aluminum combs I am here giving my findings after using the metal combs through two years. I have had charge for the past two seasons, and have personally cared for, about 900 colonies of bees. In these years I have placed in these colonies upwards of 3,000 metal combs.

A large majority of these combs were used in making increase in early spring, but many were inserted as late as the middle of July. Many were put in for honey storage at the beginning of the unexpected mesquite flow in June 1921. The extra honey secured by means of this ready available space more than paid for the combs.

In all my work I have used the standard Langstroth-Hoffman brood frames, as I wanted



One of the Combs Partly Filled

combs for brood chambers, and found that, just as with wax combs, the queens prefer old black comb. Of the very few shallow extracting combs used, the only difference I could detect between wax and aluminum extracting frames was that the metal ones extracted more. In metal brood combs used for extracting I found that where they were used ten in a body they extracted $6\frac{1}{4}$ pounds against $4\frac{1}{2}$ from wax combs similarly used.

I have found that if the metal combs are put in during a dearth the queen will not lay in them nor will she, unless the combs have been used before, during a slow light flow. During a heavy flow I have known a queen to fill a new comb with eggs within three days. I believe it is best, however, with combs such as I used, to start with them as extracting combs and after they have been extracted once to put them in the brood nest.

In the examination of colonies I found in

some that the brood was not regular and this lead me to make the following experiment. I placed two colonies under as near similar conditions as possible, one being equipped with all aluminum and the other with all wax combs. When time sufficient had passed, so that the conditions in the hives should be similar, they were examined and no difference in the location or placement of brood could be seen.

During the swarming season queen cells were very plentiful on the aluminum combs, especially where only nine frames were used in a hive. In fact, the bees seemed to prefer them, for in hunting queen cells to start nuclei with, if a hive had an aluminum comb the queen cells would be found upon it. In one yard twenty new colonies were built on aluminum combs.

A thing that can be obviated is the sealing of the cells against the metal. I have found that this is caused by the frames being close together. If only nine are used in a hive body, and care being taken to see that they do not come close to the side walls, they will be drawn plenty deep.

Three years ago it was my privilege to use some of the first combs put out by the McDonald company. While the bees used these combs, the cells were so deep that the bees would not take to them readily. The shallower combs used in 1920 were very readily accepted by the bees, and the better waxed and braced frames made in Texas in 1921 were accepted almost at once. In handling the large number of combs, I have noticed that the bees would accept those which were heavily waxed more readily than when only slightly so, and I believe that for ease in handling it would pay to have the frames better nailed.

I think that the aluminum honey comb is the greatest advance in scientific apiculture since the invention of the movable frame, hive. The fact is I think it so strongly that I shall mention them in a 5,000 word theme on "The Advanced Methods of Beekeeping," that I am to write in connection with my University English. Later, when I get my M. A. degree, I expect to write my "Masters thesis" along this same line. and I expect to mention the aluminum honey combs in both of these written documents.

Greenville, Texas.

This journal is a dollar a year.

THE LEWIS CURE FOR FOUL BROOD

ARTHUR C. MILLER

We have for years been offered all sorts of ways for combating bee diseases, some good, some poor, some positively bad until any new one was received with skepticism and left for someone else to try.

Last spring Mr. F. Dundas Todd sent me the particulars of a system the Canadians were using with marked success. Ordinarily I should not have given the thing a second thought but as it came to me so well endorsed, I tried it.

Mr. W. H. Lewis, of Edmonds, B. C., sprayed the combs of infected colonies with a bactericide, using a proprietary article for the purpose. When I tried to get the same thing here I could not find it, though it was known. On further search Prof. Franklin N. Strickland, Secretary-Chemist of the Food and Drug Commission of the State of Rhode Island and of the analytical firm of Calder & Strickland, told me what it was and how to prepare it myself.

It is Sodium Hypochlorite and is fully described in the U. S. Pharmacopoea 1870 under the title "Liquour Sodat Chlorinatae," and more fully and with variations in U. S. P. IX., but the 1870 formula is sufficient for our purposes. Any druggist can make it for you or tell you how to make it.

Briefly, take one pound of Calcium Chloride (Chloride of Lime), work it up with a little cold water until it is all pasty, then add balance of a gallon of cold water. Dissolve two pounds of Carbonate of Soda (Sal Soda) in two gallons of hot water. Pour the two together and allow to settle over night. In the morning pour the clear liquid into a jug and cork up. The sediment can be thrown on the ground for fertilizer. The clear liquid is Sodium Hypochlorite, virtually the famous Dakin solution of war time fame, a powerful bactericide and a great bleaching agent, so wear old clothes and old shoes when using it.

It is not necessary to make such a large quantity but the chloride of lime comes in one pound cartons shut tight and after opening loses its chlorine rather rapidly and the chlorine is the active agent.

To apply, use a common bush sprayer, a simple little tin affair obtainable from any dealer in agricultural supplies for about 50

cents. Shake the bees from a comb, spray both surfaces and return to the hive and proceed till all are sprayed. The bees will move away from the freshly sprayed combs but will soon return and will lick up all drops of the liquid. If the queen is seen in the course of the work, it is well to cage her for she usually goes out with the bees and does not always find her way back. As soon as spraying is finished, release the queen.

Repeat the spraying at intervals of three to four days until all sealed cells containing dead larvae have been opened and cleaned out. All eggs are usually destroyed by the spray which is an advantage.

Bees will clean out the combs very fast after the spraying and work will proceed with surprising vigor.

The spray is in no sense a drug to heal sick larvae, but is a bactericide to destroy all germs of the disease within the hive and stop spread of the infection.

I have found it to be all that the Canadians have claimed for it. I used it from full strength to a weak dilution and now use it about half water and half of the solution given.

Providence, R. I.

QUEEN BREEDERS' LICENSES

According to a new law in Georgia, going into effect on Jan. 1, 1922, all persons engaged in the business of rearing queens and package bees, will be licensed. The fee is \$25.00, and application must be made to the State Board of Entomology, who, after investigation, may issue a license; which may be revoked at any time the law or the rules of the Board are disobeyed.

While this is quite a new idea it is the beginning of regulating queen breeders and shippers of package bees. There has been a general need for something like this to curb the ruthless, haphazard manner in which much of this trade has been going on. The blanket fee of \$25.00 seems too high however, and it may be better to arrange this on a scale according to the size of the business.

The publication that will print both sides of an argument is worth more to you than one that does not do this. Otherwise the reader may be lead to believe that there is "only one way of doing things."

Beekeepers Here and There

Conducted by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

Seven or eight years ago I had an interesting visit with the editor of what I consider the greatest of all bee journals. We were discussing poets and poetry. He said: "The greatest poet I know, today, lives at Atlantic, Iowa. He has never, so far as I know, written a line of rhyme but his every line breathes the essence



FRANK C. PELLETT

of true poetry. Take his "Back Door Neighbors" as an example; who but he could have found poetry and beauty in the common Cooper hawk, or the offensive skunk?"

Mr. C. P. Dadant was right. I have carefully followed the writings of this young man and I heartily agree that surely here we can find that fire of poetry and that great fund of sympathetic understanding, that is necessary to

make the specimen of the genus homo, which we can call in truth—the naturalist.

There are four great books on which Frank C. Pellett can be well content to rest his claims for future remembrance. He need do no more than to have written these to be secure in the thought that he has risen far above the throng of his contemporaries. These books are:

Our Backdoor Neighbors; a homely book of visits with the more common of our barn yard and pasture friends, wherein our points of contact are emphasized and our points of irritation are softened by a loving and sympathetic understanding.

Practical Queen Rearing; which is the best and most comprehensive treatise on this important apicultural subject. He takes every known method of successful queen rearing and describes their salient characteristics. He compares methods and results and gives the simple rules that it is necessary to follow no matter what method is used.

Productive Beekeeping; which was written especially as a part of the great Lipencott system of Farm Manuals. This book gives minute descriptions of apiary manipulation from the beginning to the operations of the great commercial apiarist. It is written in the popular style made necessary by the requirements of the series of which it is a part, but at the same time it has a wealth of material of interest to the deeper student and the scholar who shall some day delve into our present knowledge of the secrets of apiculture.

American Honey Plants; a book, the like of which has been long looked for. It took a Frank C. Pellett to finally take the plunge and give us a book on American honey flora. Since the middle of the last century such a work has been discussed and looked forward to. Many have started to compile it and all have recognized its need and its value. At last it has been done, and even though the present work is incomplete, yet it is the foundation on which all future work of this kind must be built.

I have spoken of only these four books. Frank C. Pellett also has published a Beginners Bee Book for beekeepers and is, as all beekeepers know, an editor of the American Bee Journal. If great good fortune ever brings any of my readers to the little village of Hamilton, Illinois, let them turn to the left as soon as possible after crossing the bridge and, going back toward the

river, stop at the vine covered cottage on the bluff below the spillway of the great Keokuk dam. If they let the folks at the cottage know that they are beekeepers and then fail to get the most royal welcome of their lives, they have not followed my directions and have lost their way to the home of Frank C. Pellett, author, editor, beekeeper, naturalist, and just plain friend and neighbor.

BEEKEEPING ENTOMOLOGISTS MEET

We are in receipt of the program of the Section of Apiculture of the Association of Economic Entomologists, which will meet in thirty-fourth annual convention at Toronto, Canada, Dec. 29th. The subjects which have been given special investigation over considerable length of time are peculiarly timely and important. We feel that our readers will be interested to know what is taking place, and some of them perhaps attend the convention, so we give the program in full. H. F. Wilson is chairman and G. M. Bentley is secretary of this section of the association.

The Program follows:

Thursday, December 29, 1921, 8:00 p. m.

Address by the Chairman—"The Relation of Climate to Beekeeping Manipulations," H. F. Wilson, Madison, Wisconsin.

Reading of papers and discussions.

"Essentials of Apiary Practice and Management," by Morley Pettit, Georgetown, Ontario. (15 minutes.)

"The Correlation Between the Physical Characters of the Bee and Its Honey Storing Abilities," by J. H. Merrill, Manhattan, Kansas. (15 minutes.)

"Time and Labor Factor Involved in Gathering Pollen and Nectar," by Wallace Park, Ames, Iowa. (10 minutes.)

"Bees and Nectar Flows," by H. B. Parks, San Antonio, Texas. (15 minutes.)

"Studies on the Temperature of the Individual Honey Bee," by G. B. Pirsh, St. Paul, Minnesota. (10 minutes.)

"Cost of Poor Queens," by F. B. Paddock, Ames, Iowa. (10 minutes.)

"Factors Affecting Success of American Foulbrood Campaigns," by S. B. Fracker, Madison, Wisconsin. (15 minutes.)

Transaction of business and selection of officers and adjournment.

A NATIONAL TRADE MARK

W. C. COLLIER

A seal or small distinguishing label for use of members of the American Honey Producers League has been a need that has become increasingly apparent since the national advertising campaign has been progressing. Mr. C. H. Aeppler, of Oconomowoc, Wis., has been requested to make the designs and present them to the Salt Lake City convention, Jan. 30-31.

Mr. Aeppler wants suggestions from anyone who has ideas on this subject. He wants the design to be emblematic of the national scope of the League. Someone may have in mind the very thing that is needed. If you have any suggestion please write direct to Mr. Aeppler.

It is perhaps easier to say what should NOT appear on such a trade mark than what should be on it. By elimination, therefore, we may be able to strike the needed chord. There ought not to be any sectional reference of any kind, and that means, of course, that there ought not to be any floral display. Flora cannot help being local or sectional. There should be no mention of color or flavor on such a design. The man in the buckwheat region thinks that his honey, in color, flavor, and quality is the best. One in the white clover or basswood region thinks the same about his. We have even known good Texas beekeepers to laud the flavor and quality of our abundant horsemint honey.

Now, for what should go on the label, I do not know. I am asking you to give Mr. Aeppler your opinion. I feel that purity—freedom from any possibility of adulteration—should be emphasized. You will agree with me there, of course, but what else shall we say and how shall we express most graphically what we want to convey?

Las Vegas, N. Mexico.

CONFERENCE OF AMERICAN FARMERS

Beekeepers' associations were invited to take part in the nation-wide rally and conference of farmers held in Washington, D. C., on December 14-15. Many subjects of legislation and a program to be presented to Congress was to be discussed and formulated. The keynote of the meeting was financial, transportation and marketing conditions.

HUBAM, THE ANNUAL SWEET CLOVER

HAROLD M. CASE

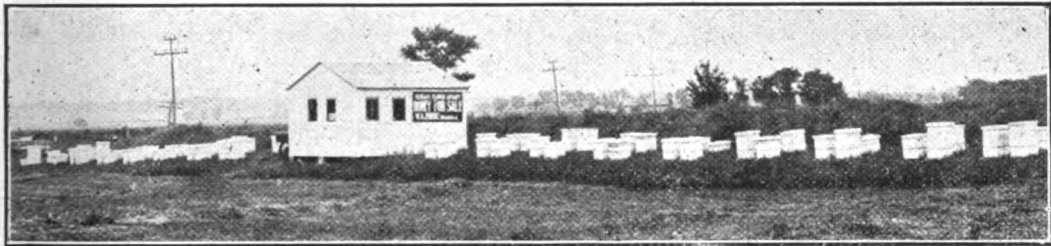
Hubam is an annual white sweet clover that has only recently come into prominence as a honey plant, for forage and improving the soil. It is superior to the biennial white and yellow varieties, making a growth and yielding as much in that time as the biennial in two years. Although it seems to have been growing a long while in five or six counties called the "Black Belt," a limestone section in Alabama, we owe it to Prof. H. D. Hughes, Iowa State College, Ames, Iowa, for bringing it into commercial prominence.

As a honey plant we have found it a most excellent one. The photo showing the bee colonies with the bee house, is an apiary on one of our Hubam fields, or right at the edge of three fields, in fact, and represents some eighty colonies placed there the forepart of July. They have made over 12,000 pounds of honey.

them as being superior to any honey on the market. It is somewhat similar to the best alfalfa honey but lighter in color and milder in flavor.

The picture showing the large field of sweet clover by the roadside is the view of one of our forty acre fields showing the uniformity of growth as well as the dense manner of growing. This was about four feet high.

The close up views show the clover in its luxuriant growth and profusion of bloom. Aside from a honey plant it shows what this crop would add in the way of humus as well as nitrogen to the soil if plowed under. In the lower right hand corner of the large illustration is shown a three feet growth up to middle of August when sown in the spring on our fall sown wheat after being harvested the usual way. This would be a good hay crop, stock pasture, bee pasture or crop to plow under instead of the rag weed and fox tail usually left to grow in the stubble fields.



Eighty Colonies of Bees Located in Hubam Clover Fields

A great many more supers were added since the picture was taken, and our bee man in charge, Mr. Jenkins, is very enthusiastic over the possibilities of Hubam as a bee pasture proposition.

The honey flow for this apiary started the latter part of June and lasted clear up to just a few days ago, making a very long period, much longer than any other honey plant we have in this vicinity. Our Hubam seeded about April 1st commenced blooming about the middle of June and has been in constant bloom all the time since. Even in the late fall, although the plants were loaded with ripe seed they were still covered with blooms and the bees hard at work.

The honey from Hubam is absolutely fine, light in color and delicate flavor. A sample taken to the State Fair and shown to the exhibitors there was pronounced unanimously by

The other photo showing a man in the field of sweet clover, with a jug in the foreground, is a picture of Henry Field, taken in the latter part of July. This shows the way the leaves are borne clear to the ground on Hubam, and also the profuse manner of blooming. The rows were ordinarily eighteen inches apart and you can see how the plants have reached across the rows, making an almost solid mass by that time of the year. By the time the field was harvested the plants were up to Henry's ears and were very heavily laden with seed. This field yielded on an average per acre 400 pounds of seed, after it had been hulled and scarified, which is a very high average, we think.

Beekeepers should encourage neighboring farmers to plant Hubam besides planting it themselves. It can be planted either broadcast or in rows. If you only have a small amount of it and want to get the best possible growth

and the biggest possible crop of honey and seed, I would plant it in rows.

Although Hubam likes best a soil that is fairly rich, and well provided with lime, I never saw a plant that seemed to be so independent of climatic or soil conditions. Reports on the success with it show that it did well on all kinds of soil, from the poorest clay to the rich loam. It also seems to thrive in any climate. Seed planted at the same time in Florida and Alberta, Canada, shows good results at both places. We have also secured seed grown in extreme southern Texas and sent it to North Dakota, and it did fine.

Shenandoah, Iowa.

A TRIAL WITH HUBAM CLOVER

HUGO T. ISENSE

Have just finished reading the Beekeepers Item, and noticed where you said you would like to hear from some one who has tried out the Hubam clover to try it. I planted on the 7th of last March one row seventy yards long, and as it had just rained, it came up within a few days. By the middle of April it was about 18 inches high and began to bloom, which it kept up continually until the latter part of August. We had an unusually dry summer and the clover was standing on the driest and highest land in the whole field, still it grew high as my head and was always ripening seed and putting on more bloom. The bees worked on it practically all day, but were very busy early in the morning and very late in the afternoon.

I have planted some now to see what it will do when planted late in the fall. As far south as I am it seems to me we could have it in bloom very early in the spring, and by planting again in March we could keep the bees busy all the time.

In order to determine its value I am going to experiment on a larger scale this coming season and will be glad to let you know the results.

Before I close, I wish to say that I certainly appreciate The Beekeepers Item. An apiary business isn't complete without it. The article by Mr. Joor in the September issue, on how honey should be sold, was worth more than the cost of one year's subscription.

Clarkwood, Texas.

THREE YEARS WITH HUBAM

J. D. YANCEY

In the September issue, you state that you would like to hear from those who have had experience with Hubam or annual sweet clover. Three years ago, I received a paper of perhaps one dozen seed, of the Root original planting of the Hughes strain. From these seed I grew seven fine plants, and secured enough seed to make a considerable planting the next year. Last spring we were too busy to prepare the ground and did not plant a very large plot, but after watching its behavior the past three years, I am convinced that when the farmer once becomes acquainted with this clover it will become one of the most valuable of cultivated honey yielding plants.

From seed sown early in March many plants were beginning to bloom the last of May and by the 15th of June had reached an average height of four feet and were a solid mass of bloom. The blossoming period continued well into August, and some of the plants grew to a height of six feet, and where not crowded made a spread almost equal to the height.

This planting was on rather thin clay loam and received a couple of cultivations, but was not inoculated; in fact, I have never found it necessary to inoculate as we have several varieties of clover growing wild all over Matagorda county.

Last fall I scattered the seed on waste ground, where the soil is deep and fertile. Here the plants made a wonderful growth, holding their own with and reaching above the weeds and other wild growth, and bearing a profusion of bloom and seed.

The bees worked on it every hour of the day, from sunrise in the morning until darkness in the evening forced them to quit, but were most numerous upon it and seemed to secure the nectar more rapidly, from ten o'clock until sundown. I have grown the biennial sweet clover in North Texas, and also in the state of Washington, where it is considered a better yielder than alfalfa, but I have never observed bees work it with greater enthusiasm than they do the annual here in the coast country.

While watching the bees upon it I have been interested to note the short time required to obtain a load of nectar; also, the reluctance with which they leave the feast for the trip to

the hive. Even after the honey sac has become distended, seemingly to the bursting point, and the usual "dusting off," preparatory to final flight, has taken place, the greedy little insect will return again and again to dip into fresh flowers.

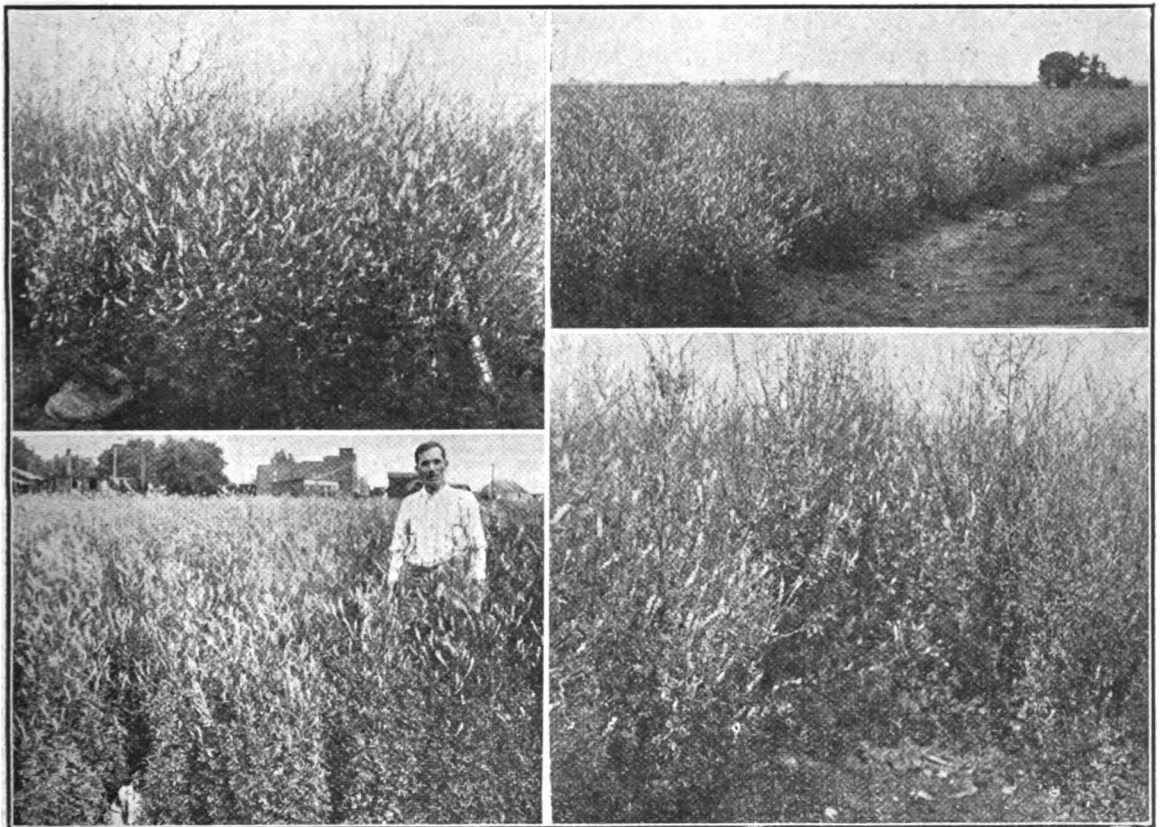
It is very gratifying to me to find that this clover thrives so well here, for I have tried to grow the biennial variety in different parts of the Texas coast without success. I see no reason why it should not succeed equally well in other parts of the state where rainfall is sufficient or where irrigation is practiced.

In conclusion, I have no seed for sale, but I believe it will pay any beekeeper to give Hubam a trial, even with the present extremely

SOME OBSERVATIONS ON HUBAM

J. E. SUTTON

Three years ago I bought some mellilotus seed and sowed it in rows in two different gardens, not thirty yards apart, yet one is of a light sandy loam and the other a heavy lime soil, with a well on the latter of which the water is so highly impregnated with lime that it is not used for drinking. I paid more attention to the clover on the sandy soil because it was easier to work it, yet I did not get more than a dozen stalks to survive on it while there was a perfect stand in the lime soil garden. I knew nothing about the plant of the annual except that it grows abundantly here on certain



Henry Field, of Shenandoah, Iowa, and Some Views of His Hubam Clover Fields

high price of the seed, as only a very small quantity is necessary to make the experiment.

Bay City, Texas.

This journal is yours for twelve months at a dollar a year.

The Beekeepers Item, \$1.00 a year.

lands. A number of the plants bloomed in about three months, and their blooming period lasted perhaps six weeks. I saved the seed and tried it again, with the same results—a perfect stand in the lime soil and not a dozen plants in the sandy loam.

Again, I was not more favorably impressed with the annual than with the biennial. The latter, after it has been once seeded, will come

year after year and have a succession of blossoms from the last of May until October, or four and a half months, while the annual blooms, for me, only six or seven weeks. I mean individual plants.

It has been known here for several years. My first attention was called to it by an old negro after I had finished a little talk on bees, honey and honey sources, and I called attention to the fact that since mellilotus flourished all around that community where I was talking, and aside from one of the best pasture plants we had, it would pay to sow it just for the bees. Mentioning that the bees would gather honey from it only the second year the negro beekeeper took exception to this statement and showed me a filled of clover he had that he called "yearling" clover, which was from knee to waist high, and in bloom. He told me he had watched it for years but he did not like it as well as the "two year" clover since it did not last as long. His theory was that the two year kind had longer roots and went deeper into the soil hence would stand the drouth better than the "yearling" clover.

There is no differences in the color, flavor, or body of the honey of the two varieties, that I can determine. The honey granulates readily, and has an aromatic flavor that is distinctive. Some like it at first, but all to whom I have sold had rather not have a large quantity of it for table use. Blended with other honey the taste is improved. Mixed one third mellilotus and two thirds tupelo makes a splendid honey. The tupelo blend does not granulate so quickly. I have samples of tupelo honey six years old that have not granulated. The blend above will granulate by the following spring while the mellilotus honey extracted in August will granulate by October. Of course, the climatic conditions, or the nectar or some other cause, may determine the time of granulation, yet with me the sweet clover honey will granulate in two to four months, while some of our honeys do not do so for years.

But the endeavor now seems to be not how much honey to make from annual sweet clover as to get rich selling the seed. The biennial seed can be bought for 10 cents a pound, while the annual seed brings \$2.00 to \$2.50 the pound, or twenty to twenty-five times as much. P. T. Barnum spoke a mouthful when he said that the American loves to be humbugged.

Gambling in wheat or cotton does not compare with the get-rich-quick schemes of the clover seed promoter.

But it is a good plant for forage, for hay, for improving and renovating run-down lime lands, but no other. If your land has no lime it will take from one to two tons of crushed limestone, or a large amount of slaked lime, to grow it. The cost of liming the land, however, will buy more honey at 20 cents a pound than can be harvested by the bees from an acre of clover for five years. If your land has lime in it then by all means sow sweet clover seed. Gather the seed and carry it around with you in your pocket and scatter it by the roadsides, on embankments, in all out of the way places. The bees will find it and repay you for your trouble.

Linden, Ala.

BULLETIN ON SWEET CLOVER

Our readers who are interested in the subject may be glad to know that the United States Department of Agriculture has recently published a new bulletin entitled, "Annual White Sweet Clover and Strains of the Biennial Form." A. J. Pieters and L. W. Kephart are the authors. It contains much valuable information on both the white annual sweet clover so much discussed lately, as well as the early blooming "Grundy County Sweet Clover," of the biennial variety. This bulletin can be obtained by writing for Circular 169, of the U. S. Department of Agriculture, Washington, D. C.

OIL OPERATORS, BEEWARE!

A honey-bee lit on a bee-man's skin,
Swung her tools and spudded in,
Bowed her back, and jiggered her pole;
And all the time she was making a hole.
The man worked on in his usual way,
Until the bee's bit struck regular pay,
Then he swung his mit with a vigorous dig,
And deftly skidded the poor bee's rig.

Geo. H. Rhea, Extension Specialist in Apiculture of Cornell University, Ithaca, N. Y., has severed his connection with that institution to assume a similar position in Pennsylvania College. Dr. Rea has a host of friends who will wish him well in his new work.

The Honey Crop Conditions

Conducted by

MISS A. M. HASSLBAUER

P. O. Box 1048

San Antonio, Texas

THE CONDITIONS IN GENERAL

The honey crop of the United States is well enough in hand that an estimate can be made on the 1921 production. The Bureau of Markets estimates that the average production per colony for 1921 is 44 pounds against 59 pounds in 1920 and compared to a five year average of 43 pounds. The loss by disease this year is given as 3.8 per cent against 4.6 per cent in 1920. Increase of colonies over spring count 16.6 per cent. The condition of the honey plants is 92 per cent of the ten year average. Average price of extracted honey received by producers for large amounts is 11 cents; bulk comb, 14 cents. More honey was sold locally this year than ever before. As nearly as can be estimated, $\frac{5}{8}$ of the crop was sold direct by the producer to the consumer.

LOCAL CROP CONDITIONS

SOUTH PACIFIC COAST: Conditions here are very favorable. The 1921 crop averaged 23 pounds against 93 in 1920. This was due to the late frosts which damaged the sage and retarded the gathering of the orange honey. This short crop has allowed the disposal of the hold-over 1920 crop. At present there is but little honey left in the hands of producers. Bees are in good shape and honey plants are said to be in better shape than for years.

NORTH PACIFIC COAST: The loss of bees from spray poison is shown in a decided falling off in the yearly production. The prevalence of brood diseases augmented this loss. Late fall flows gave some unusually large surpluses. While the number of colonies is much less than in 1920, the condition is said to be 100 per cent.

INTER-MOUNTAIN STATES: As with the West Coast, the 1921 crop was light and allowed of the disposition of the 1920 crop. The short crop is explained by unfavorable weather in the spring and the prevalence of the alfalfa weevil. Bees went into winter in fine shape

and beekeepers are hopeful. The association idea has invaded this area and plans are now being made for selling the next year's crop in a co-operative way.

PLAINS STATES: Very short crops due to late frosts followed by hot dry weather occurred all over the area. Wholesale feeding was carried on all summer. Late fall flows gave bees some stores for winter. The trade usually supplied by this area, absorbed much of the extra production of California and the East-central States.

NORTH CENTRAL STATES: Good crops were general. Late fall flows gave the bees full winter stores. Home markets absorbed the crops.

EAST CENTRAL STATES: One of the best crops for years from basswood, white clover, sweet clover and buckwheat. Asters and golden-rod gave the bees ample stores for winter.

NORTH-EASTERN STATES: Buckwheat and golden-rod made the heaviest crop on record. Bees are in good condition, having gone into the winter with the best of stores.

SOUTHEASTERN STATES: Honey crop only fair. Late frosts, cool rainy weather and then extreme drouth cut the crop. No local demand and much honey unsold.

WEST INDIES: Honey crop only 75 per cent of normal. Is mostly being exported to Europe. There is little demand in the U. S. for this class of honey which comes in barrels and must be cleaned and is usually only fit for cooking and backing.

TEXAS: While it is too dry for the best development of the honey plants, the weather for the past two months has been ideal. Broomweed, asters, yellow-top, and quite a number of fall plants are still in bloom and bees still at work. Numbers of beekeepers have taken advantage of the cool days to take off a lot of honey, which they were prevented from doing earlier in the fall because of robbing. This honey comes in handy just now as the demand for bulk comb is yet strong and the supply is about exhausted. Many bees were on November 14th collecting propolis from Mexican persimmon. The first killing frost of the season occurred the morning of December 7th. The condition of the bees all over the state is good. The average yield is near 50 pounds. The increase over last year's number of colonies is about 15 per cent.

NOTES ON TEXAS HONEY PLANTS

E. B. Ault of Calallen, Texas, sends in a specimen of a horsemint which grows in the Gulf Coast country. It is a perennial and blooms from early spring to late fall. It is worked abundantly by bees. The plant is rather short, has very narrow, almost needle-like leaves, but has flowers and flower-clusters very similar to *M. punctata*. If any of our readers have this mint growing in their vicinity, we wish they would send in specimens, with a report on its yields.

Scattered throughout the hills of the Edward Escarpment country grows the beautiful bush Boneset, (*Eupatorium ageratifolium*). This shrub bears masses of white flowers in May and again in October and November. This year it bloomed very heavily and the bees worked it abundantly. This is one of the native plants it will pay any one to cultivate as an ornamental.

Throughout South Texas there is cultivated a shrub called Siberian Pea or Bird-of-Paradise flower. The plant is a near relative to mesquite and retama. It is easily recognized by its showy yellow flowers and the very long bright red stamens. The plant, (*Poinciana gilliesii*) is a native of West Texas and New Mexico. In a few places east of the Pecos it has escaped and seems to thrive. This plant is peculiar as it secretes its nectar late in the afternoon. During the past summer bees would begin working this plant about 4 P. M. and continue until dark. Where this plant is abundant, it is valuable as the heat of summer seems to increase the amount of bloom.

A. H. Alex, State Queen Breeder, and C. E. Heard, Bee Inspector, have spent November inspecting bees in Wilson County. They report the bees of that county in fine shape and that foul brood is not so prevalent as is commonly supposed. They report that the honey plants are in good condition, horsemint especially.

Louis Biediger of Lacoste, Texas, says "elbow bush" (*Adelia*) is ready to give a heavy crop of flowers. This plant is one of the best early pollen plants. It is found in large number throughout the limestone section and less profusely in the river valleys.

Dr. Chas. T. Vorhies, of Tucson, Ariz., reports Desert Bloom, (*Baccharis sarathroides*), as a fall nectar plant. In Texas there are three or more species of *Baccharis*. It seems as if this plant is here so confused with willow that it has received no common English name. Along the Gulf Coast where *B. holumifolia* and *B. angustifolia* occur by the acre, the Mexicans call it "Yerba dulce." This is a very appropriate name as the odor of the flowers can be detected for miles. Bees work them heavily but there is no record of honey flow from these plants. It is believed, however, that some of the heavy yields of amber honey from the coast country are from them.

BEEES ARE IN GOOD CONDITION

The condition of Colonies on November 1, was reported as slightly better than average at this date. The summer losses from disease are estimated at 3.8 per cent as compared with 3.0 per cent average and 4.6 per cent in 1920. The number of colonies has increased since the spring count by 16.6 per cent. As the usual winter loss is about 12 per cent an increase of a few per cent in numbers of colonies next spring over the number this spring would be indicated, provided the losses during the coming winter are average. The increase in the Southern States average rather low, mostly between 3 and 10 per cent, and numbers have actually decreased in North Carolina. The increases range from 20 to 35 per cent in Vermont, New York, Pennsylvania, Ohio, Indiana, Michigan, Minnesota, North Dakota, South Dakota, Montana, Wyoming and Idaho. Illinois shows an increase of 10 per cent Wisconsin 17 per cent, Iowa 9 per cent; Texas, Colorado and Utah 15 per cent.

Colony stores for winter and early spring average 37.7 lbs. which is 1 per cent more than the usual supply. Generally speaking the fall flow has been good and colonies are well supplied. Only in occasional areas has feeding been necessary.—Bureau of Market Reporter.

The sixth annual stockholders meeting of the Texas Honey Producers Association will be held in San Antonio, Texas, on Tuesday January 17th. A large attendance is expected. Every beekeeper, whether a member or not, is cordially invited to be present.

SOME PROMINENT MEN IN TEXAS

H. B. PARKS

When the beekeepers of Texas want something, they decide what they want and get together the persons who can do the work. Of course they get the results. Why shouldn't they, when they have some of the best men in the United States on the job. The picture given below illustrates this fact to a nicety. From left to right we have E. G. LeStourgeon, Manager Texas Honey Producers Association, Dr. M. C. Tanquary, State Entomologist, Dr. B. Youngblood, Director Texas Experiment Stations, and Loyd R. Watson, State Apiculturist, who were called upon to plan the next two years' work for the State Experimental Apiaries.

Instead of sitting in the office and theorizing they went to the bees, saw the conditions and



Planning Experimental Work in Texas

needs, and then and there formulated the projects for the future work.

In the picture you see these men in the State Queen Yard, nine miles north of San Antonio, Texas, just after they had decided on a course of procedure for the work to be undertaken.

E. G. LeStourgeon, better known as "Guy" by his friends, is, besides Manager of the Texas Honey Producers Association, President of the American Honey Producers League, and a member of the Texas State Legislature. He is known far and wide for his efforts toward greater co-operation among beekeepers. You meet him and you begin to co-operate. His friendly spirit and thorough knowledge of and his versatility in the beekeepers' needs makes in him a combination that gets there. "Co-operation" is his strong point.

The next is Dr. Maurice C. Tanquary, State

Entomologist, and Chief of the Bee Inspection service. The Doctor is the kind that finds a problem and then gets the solution, no "ifs" and "ands" about him, nothing but straight goods. He likes thrills and snappy stuff, so several years ago, he climbed the north pole and after staying three years got tired of waiting for Dr. Cook any longer and walked home. He had charge of the work at the State Agricultural College of Kansas before coming to Texas. He is one of the owners of the Blue Kaw Apiaries in Kansas and owns bees in Texas.

Dr. Youngblood needs no introduction to the beekeepers of the Lone Star State. He is just "Bonny" to them. Many of them have watched him climb until now he is a "Ph. D.," and the Director of the best Experiment Stations on earth. Bonny was inoculated with the bee fever by being stung by a bee while eating mustang grapes on the banks of the Brazos River when a boy. When his wife read Maeterlinck, he had the first serious attack. He read Langstroth and the fever has raged ever since. Bonny, whenever you need the help of the beemen of your state, just hum.

Lloyd R. Watson came to the Texas Experiment Station direct from Dr. E. F. Phillips' office at Washington, D. C. This fact alone shows he is a beekeeper. Lloyd tells us he learned to keep bees back in "York State," where, by dint of hard work and cellars, they manage to keep bees alive. If that does not fit a man to solve wintering, and any other problem, what would? Lloyd is the boy that is going to tell us what we want to know.

San Antonio, Texas.

A farmer's short course will be held at Kingsville, Texas, on January 9-10, and beekeepers will be much in evidence. E. J. Loyd is arranging the program for the beekeeping section and many good things are in store for visitors. H. S. Mobley and Bertha Dahl Laws are to be the principal speakers. The editor of the Beekeepers Item and the President of the American Honey Producers League are also on the program.

J. A. Engle, of Sioux City, Iowa, is at Beeville, Texas for the winter. Mr. Engle and son, C. S. Engle, have large beekeeping interests in Western Iowa. He reports a good year, with plenty of honey and customers for it.

The Beekeepers' Item

A Small Item in Itself, a Big Item for Beekeepers.

LOUIS H. SCHOLLEditor and Publisher

Published Monthly.

Subscription Price\$1.00 the Year

Entered as second-class matter Dec. 13, 1916, at the Postoffice at New Braunfels, Texas, under the Act of March 3, 1879.

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ADVERTISING RATES: These will be furnished upon application.

We wish all our readers a happy closing of this old year, and a joyful entrance into the new. All of us have passed through a period of most trying times but the future before us will bring us many better things. As we are gradually getting back to normalcy we shall have overcome the hardships that have confronted us, and which has held us back from making greater progress. To us it seems that a bright future awaits us, and that we are all expected to take hold of the opportunity and make something of it. So let us be hopeful then, and be up and doing, so that much may be accomplished and that we shall be well rewarded.

In this issue appears quite a bit of information on the annual white sweet clover or Hubam, in response to our recent editorial asking for such from any of our readers who may have had experience with it. This is very much appreciated since the editor's acquaintance with the plant is very limited, and we feel it will also be welcomed by our readers. But whether this annual sweet clover will do well in any given locality can, however, be determined only by a trial planting. This need not be on an extended scale, and hence without any great expense. In fact that is really the only way to ascertain this. If it does thrive and yield it may prove to be a valuable supplement to the natural flora in the locality. There are many places

where the honey flows may be prolonged, while in others the bees may be tided over dearths between the early and late flows.

There will come a time when much more honey will be produced than today at prices that will be more remunerative than at present. But it depends upon the beekeepers who are progressive enough to do so, to push a production of honey great enough to last the year around, and to distribute this in a more sane and systematic manner. Never will we reach our highest success so long as we produce a crop that will not last a whole year, and then, on top of it all, shove it off unto the markets in a few months time, to leave these bare of honey later on.

JUST AS TRUE NOW AS THEN

It may be of interest to the readers who have more recently launched into beekeeping, to know that efforts to organize along the lines of the present American Honey Producers League have been made in the past. This was brought freshly back to the mind of the editor recently while pondering through some of the back volumes of bee journals. Of particular interest is an editorial by Editor E. R. Root, of Gleanings in Bee Culture, of April, 1905, (Page 409, Vol. XXXIII), in regard to the then proposed honey producers' league, which is as follows:

"If the beekeepers of the country hold back their contributions toward this laudible enterprise they will have only themselves to blame if the honey market is not materially toned up within a year, or possibly less time. If there is any beekeeper who thinks that the new organization is a good thing, and that it will go anyway, even if he does not help it, and that he will secure the benefits without his contribution, he will be most woefully mistaken."

This is just as applicable today as it was then; and it resolves itself into the one conclusion, that the beekeepers of the country must give of their financial as well as of their moral support toward the movement of organizing their forces.

See our clubbing offers with other bee journals and books on beekeeping.

THE MILLER MEMORIAL LIBRARY

A communication from the Miller Memorial Library committee just received states that the response to the announcement of this committee that the fund collected from Doctor Miller's beekeeping friends would be used to establish a memorial library of beekeeping has been gratifying. As has already been announced, the original fund is not to be spent for books but only the income shall be used for this purpose, so that in contributing to this fund, beekeepers are taking part in the establishment of a library to last so long as there are bees and flowers. With this plan it is obvious that as time goes on this library will be increasingly valuable. It is planned to put this library into the care of some one of our leading educational institutions so that the proper care of the books and journals will be positively assured. It may further be pointed out that this memorial library will grow not only from books purchased from the income of the fund but from books and journals contributed by individual beekeepers.

Several beekeepers organizations have already contributed liberally to this fund. In most cases the names of individuals contributing have been sent in, so that in the published list of contributors these sums do not appear as association contributions. As there are many meetings to be held within the next few months, the committee would urge that at each one the importance and value of this library be set forth and that every effort be made to enlist the support of beekeepers in attendance. In each case the funds collected should be transmitted through the secretary or some other person indicated, to the chairman of this committee. The committee consists of the following prominent beekeepers: C. P. Dadant, chairman, E. R. Root, E. F. Phillips, E. G. LeSturgeon, and B. F. Kindig.

It has also been decided to publish a complete list of the contributors in the January issues of the bee journals, and the same will therefore also appear in our next issue of this journal.

John C. Frohliger, of Oakland, Calif., well known to the beekeepers of the West, called on some of the beekeepers in Texas in November.

BEEES HAVE LEGAL RIGHT

Every once in a while the question of the right of beekeepers to keep bees in cities bobs up. Many cases have come to our attention in which beekeepers got into trouble with their neighbors because some member of the family was stung by the bees, or on account of the bees depredating on their property in some way or another. It was a problem that had to frequently receive the attention of the legal department of the old National Beekeepers Association of this country in the past.

Perhaps the most recent of these is a case occurring in Kansas City, Mo., recently. The decision rendered was the same as in former cases.

"A bee has a right to roam at will," Judge Nelson B. Johnson ruled in the circuit court. Judge Johnson was hearing an appeal in the case of Lee Cooley, fined \$50 in police court some time ago on the ground that he harbored a "vicious bee." The complaining witness at that time asserted that one of Cooley's bees had stung a child five times. Judge Johnson, after listening to the testimony of the bee experts, announced he was convinced that a bee could sting but once. He held a city ordinance restricting the wanderings of bees was unconstitutional and ordered that Cooley's \$50 fine be remitted. The American Honey Producers League had made a test case of the affair.

ALFORD TO FARM BUREAU

G. H. Alford, former editor of *The Progressive Farmer*, and enthusiastic friend of beekeepers and beekeeping, has accepted the position of Secretary of the Texas Farm Bureau, with headquarters at Dallas, Texas. There has always been a feeling among the beekeeping associations that there should be a closer relation between them and the farm bureau. With Mr. Alford at the head of the latter organization there will be an added incentive for this action.

Can the tomato, pickle the cucumber, kraut the cabbage, preserve the blackberry? Yes, and extract the honey!

Some beekeepers are more progressive than others because they read and study the subject matter of bee journals.

WHY NOT HAVE A "HONEY DAY?"

— — —
MRS. E. L. DuCHANE

We are strong advocates of honey, using it on our table at all times in the place of sugar or syrup, and use it practically in all of our cooking, and so I am taking the privilege of giving a little information upon the value of honey in the dietary, for, upon its value as a health food very much could be said.

Sugar is purely a laboratory product and, as it comes to us, is not only deprived of all mineral salts but all other health-giving elements, such as the syrup possesses when in its natural state. Its persistent use will set up an acid condition of the stomach known as acidity or acid stomach. As this acid is absorbed into the system the person becomes anemic and bothered with indigestion, rheumatism, chronic colds or any other of a long list of ills. Often times all that is necessary to cure this is to stop the use of all sugar. However, they may use all the honey they desire without any bad effects at all as honey is a natural food and, when taken into the stomach acts just opposite to sugar by opposing all fermentation. Many malnourished children will begin to gain almost immediately if honey and fruits are substituted for all their other sweets. Any one suffering from diabetes is supposed not to be able to eat any sweets at all, yet a doctor recently told me that he had been experimenting for some length of time with two diabetes patients and found they could take one teaspoonful of honey a day without any bad after-effects.

If the American people would use honey instead of sugar and syrup for a few years there would be considerable less work for the doctors and fewer little graves and broken-hearted parents.

Throughout the country they are having their various days, such as "Apple Day," "Orange Day," "Olive Day," and so forth, so why not have a "Honey Day" as a start toward teaching the people to make every day "Honey Day," thereby building health and happiness? So let our slogan be, "Eat more honey."

I am giving, for the benefit of those who would like to try some new honey recipes, the

following, which upon repeated trial have given the most delicious dishes.

PRESERVED FIGS

Heat one pint of honey to the boiling point then add two parts of peeled figs and cook slowly for forty five minutes. These are delicious and are very laxative.

CRANBERRY SAUCE

Bring one cup of water and three-fourths cup of honey to a boil; add one quart of cranberries, cook ten minutes, and pour into moulds.

DRIED PRUNES

Thoroughly wash one pound of prunes and place in a quart fruit jar; add one-half cup of honey and fill jar with boiling water, screwing on cap and let stand for thirty-six hours when they are ready to serve.

APPLE PIE

Line a pie plate with crust and fill with sliced raw apples; pour three-fourths cup of honey over them, cover with dots of butter and a sprinkle of cinnamon; add four tablespoons of cold water, cover with crust and bake in a moderate oven thirty minutes.

COTTAGE CHEESE SALAD

Barely cover three-fourths cup of raisins with boiling water, cover tightly and let stand twelve hours, then thoroughly mix with two cups of cottage cheese and one teaspoonful of salt. Place a heaping tablespoonful on a lettuce leaf and serve with whipped cream sweetened with honey.

CHOCOLATE CAKE FILLING

Heat three fourths cup honey; add one cup of grated bitter chocolate that has been melted over a pan of hot water; cook together ten minutes, stir in two tablespoons butter and one teaspoon vanilla, and when partially cool spread on cake.

Miami, Arizona.

— — —
Better distribution of honey would result in better prices, and a more profitable beekeeping in general. The lack of a better system of distribution has failed to get honey into many places where there was a shortage, and away from other places where it was plentiful and the prices low. It has also failed to keep more honey being shipped to market centers than these could properly take care of, causing a slump in prices on account of a glutted market.

ENCOURAGE GRANULATED HONEY

DR. A. F. BONNEY

It seems only yesterday since extracted, or "strained" honey, as it was popularly called, was looked on with more than suspicion, and I remember seeing in a pamphlet about honey; written by Dr. C. C. Miller, the statement if you saw a jar of liquid honey with a piece of comb honey floating in it, it was almost certain to be adulterated. I called his attention to it, and received a very nice reply. He acknowledged the error, but I shall always believe that when he wrote the pamphlet the statement was practically correct.

At that time, also, comb honey was not above suspicion, for there was a story floating about in the press that honey producers made artificial comb, filled it with glucose, sealed it with a red hot iron and sold it as pure honey. This canard is now about killed, as is the one that beekeepers fed their bees sugar and sold it as pure honey.

The pure food law has now been in force so long that we seldom hear anything about adulterated honey, and as a result the use of extracted honey has so increased that the difference in price is so small that a vast number of honey producers have abandoned the comb in favor of the extracted. I read that California formerly produced 95 per cent of comb honey, but now produces 95 per cent of extracted. Today it is practically only the small producers who bother with comb honey, so far as I know.

The advertising extracted honey received during the World War had much to do with making it popular, and untold thousands of persons tasted extracted honey for the first time as a result of it. Having once tasted they continued its use, and today it is practically only the older people who persist in calling for the comb, and many of them when they find the extracted is somewhat more economical in use accept the liquid sweet.

What has been done with extracted honey can be with the crystalized form, commonly called granulated. This great change in public taste has occurred since first I began persecuting the bees with my attention and questions a few years ago. All we have to do is advertise, or, I might say, continue to advertise, for almost all the labels now put on cans of ex-

tracted honey have something to say about rendering the honey liquid if it should be granulated. The A. I. Root people go so far as to state in a fine pamphlet they are sending out that granulation is a proof of purity. I am quoting from memory. However, the statement is a true one.

While a statement of purity presupposes that there is impurity, it is a common thing for advertisers to insist that their product is pure, and honey producers use the word liberally. Using it, however, we should word our notice of purity so that the purchaser may understand at one reading that the honey they buy is unadulterated, unsophisticated, undefiled, uncontaminated, unmanipulated, undiluted, unchanged and unheated. If you have room on your label tell them why you do not heat your honey, as all that is gained by so doing is that it will remain liquid, and the loss is that heating destroys the vitamins and drives off the delicate flower aroma so delightful in honey.

Explain plainly that if they wish the honey in a liquid form all they have to do is set the container in hot water.

One of the principal reasons for encouraging the use of granulated honey is that it will save the producer much work and loss from leakage and theft of part or all of a can. In shipping granulated honey by mail there is practically no loss. Where honey is in the liquid form even the square can and cardboard carton are not complete protection. I have had them perforated in the mail sacks. Even a "fragile" stamp is not always enough to insure safe delivery.

There is another thing which in the fullness of time may prove a gain, and that is the color line will be obliterated. When honey granulates one can not say it was a light or dark honey, and for this reason it will not make any difference if we put up white clover or heartsease honey. This I know from actual experience. The gain comes in here. Honey producers are offered two to five cents a pound less for a rather dark honey than for the white and sweet clover article. With the color-line abolished we producers would be just that much better off.

At a meeting of our state association in 1920, I mentioned that in 1921 I intended to not heat my honey at all, let it granulate, and ship it in that form. The reasons I gave were what

I said above, and further, that I should save quite a sum on containers, as the five and ten pound pails, friction top, cost much less than the six and twelve-pound cans and the necessary cartons. Some of the beekeepers who heard me, the old-timers, thought, "This honey will sour," and "He can never get away with that." However, I did just as I promised, and have sold about all the honey I produced in 1920-21. I may have a thousand pounds on hand, but 80 per cent of the honey sold was sent out in the granulated form.

I took the precaution to paste on every can a slip which reads:

All Pure Honey

Will granulate in time, which does no harm. If you prefer it in liquid form simply set the can in a dish of hot water, when the honey may be poured off. It must not be boiled.

Many prefer honey in the solid form. Try it once.

THIS HONEY IS ABSOLUTELY PURE

To give you an idea of how the granulated honey idea is taking hold of beekeepers I shall state that I have sold more than 60,000 of these slips in the past six months. Anyone can, of course, get them up for themselves, adding their name and address, but as a label is used this is hardly necessary.

The use of granulated honey may have a tendency to correct an evil which does much to harm honey producers, and that is the lack of constant supply. We have increased the demand for honey, but have not added to the supply, or at least we have failed to increase the supply in proportion to the increased demand.

The reason of this, or at least one reason, is that we formerly were obliged to dispose of our comb honey crop early or suffer a loss, as the honey would granulate in the comb, get destroyed by insects, or, if kept in a changing temperature, be injured. Comb honey was very liable to be injured in transit. All this is obviated when honey becomes granulated. It will keep unchanged for years, and sell for just as much as that taken freshly from the hives.

Granulated honey has been a growing fad with me for years, but I am not the only one who sees benefits in crystalized honey, for

Mr. Latham, I think it was, had in the American Bee Journal a most excellent article on what he designated as "Honey-Butter." If a few more producers will use their influence in favor of granulated honey it will not be long before it will be selling freely.

Fortunately honey producers are becoming organized, and it is not impossible that before long the American Honey Producers League will take up the matter.

I am getting up a label for my own use, and have this form arranged:

HONEY-BUTTER

This is merely honey which in a natural manner has taken on a solid form, as all PERFECTLY-PURE honey will when exposed to changes of temperature.

To prevent this, honey was formerly heated quite hot, but while it made it stay liquid it destroyed the VITAMINES, and drove off the delightful flower aroma.

If you wish honey in a liquid form set the container in water as hot as you can hold your hand in. THE SLOWER you liquify the honey the better.

THIS HONEY IS ABSOLUTELY PURE

Publicity of this kind will help much in popularizing honey in the granulated form.
Buck Grove, Iowa.

ORGANIZATION IN WISCONSIN

H. L. McMURRY

The beekeepers of Wisconsin have been very slow at organization. This was only natural, for they are scattered over the entire state. There are a few beekeepers in every community, each producing a finished product which in most cases is marketed among his neighbors.

For many years a small number of beekeepers have met each winter in Madison, calling themselves the State Beekeepers' association. Not until 1920 did any considerable number of the commercial beekeepers gather at this meeting. Of late there seems to be a common impulse among the honey producers to get together and solve their problems in a co-operative manner. As a consequence the membership in the state association has increased from about one hundred in 1917 to 708 at the present time. In addition, 43 county beekeepers' associations have been organized.

Madison, Wisc.

Gossip With Our Neighbors

Discussed by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

E. F. Atwater, in December Gleanings, gives a good write-up of his experience in the right number of colonies of bees to put in one yard and seems to think that it is hard to over-stock a location. This may be true in the alfalfa country, but with us we believe in fewer hives in a yard and having our yards closer together. Experience has shown that the smaller yards give the most honey and are easier to handle.

The questions revolving about the subject of migratory beekeeping are given attention by A. Norton in the Western Honey Bee. Some of these problems require thought and may become the subject of legal battles. Mr. Norton likens some of these bee movers to predatory nomads, "who regard not the rights, interest or welfare of weaker persons residing in places where bee ranges are invaded." As this business develops it is certain that some rules must be evolved, and it may be that the enactment of regulatory legislation will be necessary.

Our Japanese friend, Yasuo Hiratsuka, answers the question in the Beekeepers Review of whether or not it is natural for bees to swarm. Mr. C. E. Fowler had referred to the swarm as the result of the impulse to breed or reproduce. Mr. Hiratsuka points out that in bees the individual does not count. The swarm is the entity. In other forms of life the individual counts. Not so with bees. Bees can only "swarm" as nations could be said to "swarm" as when Englishmen populated Australia. He asks, "Is not North America a swarm from the British hive?" The individual bee cannot reproduce a swarm. Only a complete colony can do so.

Dixie Beekeeper has an illustrated article in December on the aster as a valuable honey plant. It is the last honey plant of the season and therefore extremely important because of

its providing winter stores. Like the broomweed of Texas, it continues to bloom and yield nectar up to the first heavy frost. As editor Wilder says, "This source alone saves hundreds of thousands of colonies each year in Dixie-land. There are four varieties of asters, but only two, the white and the purple, are important as honey plants."

G. S. Armsond, of Sheepcombe Strand, England, gives, in Gleanings, a long account of beekeeping in South England, and says: "The Admission metal comb (semicomb) may be said to have won its way. It is a marvel of construction, which the bees seem to appreciate no less than their masters." This semi-comb as we understand it is a cast aluminum septum and is much thicker than the MacDonald comb. If heat had much effect on metal combs it would show quicker on this septum than in the Texas made aluminum comb. As Editor Abushady of the Bee World (British) says, in substance, "Where these (metal) combs are used in hives that are given the same amount of protection needed by wax combs, they are a veritable gold mine to the beekeeper."

Elmer Beach, in the December American Bee Journal, has an article on the cost of honey production. He is right in placing a high value on his drawn combs and we note that in getting a value for them he takes the exact cost of the aluminum comb. In other words the cost of a wax comb is as great as the purchase price of a metal comb. In these articles on cost production, the amounts vary *enormously with the parties* making the estimates. It is to be remembered that in making such estimates, if the owner charges for his labor then the business must be regarded as an investment, and if the sum received equals 6 per cent on the money invested the owner should be satisfied since he receives as much as gilt-edged bonds pay. On the other hand, where the owner does not charge for his own labor his wage is the net profit.

The Beekeepers association of Alabama County, California, publishes its own bee paper. It is a well edited and printed eight page publication entitled "Bees and Honey." The December number contains the program for the Beekeepers Short Courses to be given this

month in California. Cary W. Hartman, of Oakland, is the editor. It contains a statement by R. B. Calkins that the California crop for 1921 totalled ten million pounds of honey, 90 per cent of which was extracted honey.

In the December number of *Gleanings*, Geo. W. York expresses a doubt that honey is an older food than meat. Brother York reads a different account of creation than I do. I cannot imagine Adam slaying fellow inmates of the Garden for food but I can picture the honey bees building comb and storing nectar. One who does not accept Moses' history, and prefers to believe Darwin's, will also confess that bees made honey before man ate meat. Most of the criticism of the American Honey Producers League and its advertising campaign is about as pertinent as this one from Spokane.

In the *Beekeepers Review*, F. M. Baldwin writes up the Wilder apiaries of Georgia and tells how all records for number of colonies and amount of increase have been broken. "His plan was an *increase* of 3000 colonies. You may say that no man ever had that many bees. Well, our friend Wilder reached the ten thousand mark long ago."

The experiments of the Tricoire Brothers, as translated for the *American Bee Journal*, are very interesting. These men have found out how much nectar bees carry to a load and the time required to obtain the load. Careful measured amounts of honey were placed in a tube and the number of visits necessary to empty it gave accurate knowledge of the capacity of the honey-sac. These experiments were very interesting when taken in connection with those of Dr. J. H. Merrill, of Manhattan, Kas. It is rather surprising that the figures arrived at by the Messrs. Tricoire agree substantially with those of Mr. Parks of Texas as to the carrying capacity of the bees, although his figures were deduced from an altogether different line of reasoning.

Jess Dalton ought to be careful or we will name him the iconoclast of beekeeping. Imagine a man in these days who can seriously lift up his voice in defense of the worthless drone comb. Listen to him in the *Dixie Bee-*

keeper: "If I have a queen that the record shows her stand to be extra good for two years, I do not care if she has a super full of drone comb." His idea may be a good one. It agrees with the stand taken by Henry Brenner that the drone is as valuable as the queen in selection and that good drones are as much or more important than good queens.

Western Honey Bee reports the invention, by an Upland, Calif., man, of another artificial honey comb which it is claimed differs somewhat from the MacDonald comb. We agree with friend Knabenshuhe when he says: "That an artificial comb will eventually take the place of comb made by the bees we regard as certain."

The effect of altitude upon nectar secretion is treated by John H. Lovell in the December *American Bee Journal*. We have often noted that certain plants produced nectar in some localities and were of no value in others. In fact, there are several factors that enter into this. Relative humidity of the air and soil types all exert an influence on nectar secretion. Mr. Lovell points out another important factor which is the vegetative growth of the plant. When a plant is growing vigorously, even though in full bloom at the time, the flowers seem to produce less nectar than when the plant is in its decline.

A New York subscriber asks the Editor of *American Bee Journal* why the Texas rules require the heating of extracted honey. He replies that it is to prevent granulation but condemns the practice and warns that heating may destroy the delicate flavor of the honey. We believe friend Dadant is wrong. Heating to 120° F. does not prevent granulation but permits the honey to be strained and improves its sparkling clarity. In the *Beeware Bulletin*, Frank Rauchfuss refers to honey that had been heated in a capping melter. He says: "There would be no injury to color or *flavor*. The body was especially good, and the flavor did not indicate that it had been overheated at all, in fact, anyone would call it a very good grade of extracted honey."

The articles on paralysis, by Major Shallard and Henry Brenner, in the last issue of *The Beekeepers Item*, remind us that it is now only

five years ago when Mr. Brenner and myself announced our discovery that the "trembling disease" of Southern United States and the tropics was in no way related to Isle of Wight disease, but that it was caused by the use of bad or fermented stores in preparing larval food by the nurse bees. We could not, at that time, have foreseen the discovery of the acarine cause of the more serious disease, by Dr. Wood, which goes far to prove our contention. In fact, we now feel that our theory is firmly established.

R. M. Rawlin, of Gilmore, Calif., has a great deal to say in his article, in *Western Honey Bee*, on "Valuable Hints on Beekeeping," about spur combs, and he says, "Get the proper bee space, and you will have no spur comb." Exactly right, buy your beekeeping supplies manufactured by standard companies. Saves both time and money.

Mr. A. H. Pering asks in *American Bee Journal*, "What is the sex of eggs dropped aimlessly by a queen?" If we can gain anything by analogy, these eggs are not fertile and, therefore, will, if they hatch at all, develop drones. This is arguing from the fact that birds and some insects have a habit of dropping many infertile eggs. From experience with hatching the eggs of other insects, it was found that eggs dropped and not placed by the insect would not hatch.

The loss of bees through death by poison is yearly increasing. A. E. Burdick reviews the situation in the *American Bee Journal*. The loss has become so serious in the Pacific Northwest that the honey crop is greatly reduced. This problem has been growing for 25 years and there seems to be no relief. Where is some ambitious young chemist who wants a job? What a chance! Just find what a bee does not like and put it into the spray. The most recent phase of this problem is with the railroads. Certain lines last summer attempted to kill the weeds on their right-of-ways by use of a spray of arsenic and lye. It not only killed the weeds, but also bees, cows, horses, chickens, pigs, and even a few humans. Many apiaries within a mile of the tracks suffered. Despite the pleadings of beekeepers, the railroads say they will continue to spray.

W. J. Sheppard, Arthur C. Miller, and others have occupied much space in the last two months on the use of "B-X," a proprietary preparation containing hypochlorite, as a treatment for brood diseases. This disinfectant was experimented with by W. H. Lewis, of British Columbia, and found very beneficial in cases of European foul brood and partially so in American foul brood. Arthur C. Miller has lately tried out the drug and thinks it a cure for European foul brood but has not tried it on the American disease. Drugs have been tried many times without success and while we believe that some day a disinfectant will be found for American foul brood we will still purify by fire until some of our scientists give their approval of drugs.

THE SPIRIT OF COOPERATION

Cooperative marketing is the best solution yet offered to the problem of honey sales. There is no beekeeper but has recognized the advantages presented by this plan.

Cooperative marketing would have been the only system years ago if it had not been for the unpleasant experiences of some of the early associations. With no experience and precedent to guide them, the early associations came to a rapid and disastrous end, caused often by undue enthusiasm in the enterprise. Today the tone of the world is changed. Today, cooperation is the keynote of business. The experiments of fifty years have evolved an association plan that is feasible, easy of promotion, and successful in operation. The only requirements for success are loyalty of the members and faith in the officers. That local and state associations are successful, needs no further proof than to mention the Colorado or Texas honey producers associations. That nation-wide co-operation is not only possible but successful, is witnessed by the first year's work of the American Honey Producers League.

Built on the wreck of past ventures, in one year it has been able to create a demand for honey in the midst of a buyers' strike. It has created a feeling of confidence between the various sections of the states. It has not only the key to the market problem but has the gate well open. That the field so opened be occupied, and the advantage gained may be held, every beekeeper, no matter how large or

small, must aid this movement. This does not mean for you to give up your own association or identity, but simply means that you must become a better member of your own local association and that your association be affiliated with the League in its general oversight over those matters in which your association comes into contact with others.

The Salt Lake City meeting of the League promises to mark the beginning of a new era in beekeeping as a business. Your association should be a member of the national organization and send its delegate to this meeting. If not then you should use every bit of your power to get it to do so. It will help to swell the attendance at Salt Lake City, Utah, Jan. 30-31, 1922. The American Honey Producers League is not for any person or party nor place, but its aims are to be the spirit of all beekeepers everywhere.

INVESTMENTS NEAR HOME SAFEST

Thos. F. Gilchrist, Vice President, Commonwealth Edison Co., relates a story of an old couple who lived in Vermont. The woman bought foreign bonds and mining stock, while the man bought stock in the local electric light and power company. When their banker brought up the question as to why he bought light and power stock, the old gentleman said:

"Well I don't know much about mines or foreign countries, but I can see the sun go down here in Vermont every night. If I get worried about my investment, all I have to do is to turn a switch, see the light, and I know my investment is safe and working."

And this reminds us that there are beekeepers who have spent hard earned money in oil, mining and other stock schemes, never to see it again. Why not do like the man above, invest it in co-operative honey producers organization stock nearer to you, where you can see the sun go down? This will enable you to keep bees more profitably, keep more of them; and if you should get worried about your investment, just go out and take a look at your bees, note how industriously and unconcerned they go about their duties, safe and working, then do likewise and forget about your worries.

It is never too early to subscribe for a good bee journal or to renew a subscription.

A SWEET CLOVER CIRCULAR

Of interest to beekeepers is that farmers in the North Texas counties served by the Texas Agricultural Experiment Station, are showing active interest in the possibilities of white sweet clover as a forage crop and soil improver. Inquiries have been coming in so rapidly that Superintendent C. H. McDowell has prepared a special circular on sweet clover, which he is distributing to those interested. The circular gives complete instructions in the production and uses of the new crop as developed during the past four years at the station, and will be mailed upon request to him at Denton, Texas.

Special attention is being directed to several plats of ground at the station, which have been recently plowed after a two years growth of sweet clover and the mellowness of this soil, as compared with plats plowed at the same time but on which clover has not been grown, is very marked, and farmers, observing the difference, are eloquent in their acknowledgment that they are now convinced that sweet clover pays. They say that the mechanical condition of the soil and the increased productiveness accomplished by growing sweet clover, are quite sufficient to justify the crop, even if it had no value as forage, but the hay crops and grazing value are quite enough to justify sweet clover production, even if it has no value as a soil improver.

Florida beekeepers held a "Florida Honey Week," the latter part of November for the purpose of advertising Florida honey. The beekeepers in that state are quite awake. In October The Florida State Beekeepers Association held its second annual meeting of two days at Gainesville, Fla., at which Wilmon Newell, E. R. Root and Dr. H. R. Trusler were on the program.

The American Honey Producers League meets in second annual convention at Salt Lake City, Utah, on January 30 and 31. State associations and all affiliated bodies are expected to send delegates, and every beekeeper who can do so is urgently requested to come. Our Utah brethren are preparing a royal program of entertainment and instruction.

Texas Honey Producers Ass'n

Notes by

E. G. LESTOURGEON, Manager

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San Antonio, Texas

BIRTHDAY GREETINGS

This Association is five years old today. I have just read over the minutes of our first few meetings and have smiled at the timid manner in which we started and the doubts that were expressed of our ultimate success. Few of the 79 men and women who met here five years ago and launched this frail craft, could have foreseen that in this short space of time we would number our members by the hundreds, and our investments by the tens of thousands. No one person has accomplished this, nor could have done so. No small group, no matter how devoted, could have done it. It took the great beekeeping fraternity of Texas, working together in harmony and intense earnestness, to place our great Association in the high place that it now holds among its sisters. You, my friend, have done your share and you can well take unto yourself the credit.

The year just past has been our hardest one to date. Deflation of markets and reduction in prices have occasioned us no mean loss. Unforeseen flood and adverse conditions have beset us, but our foundation is firm and we can face the future in all confidence. We have passed the formative period and will continue to grow from this time forth in numbers and in strength. With our backs to the past, with pride in our achievements, with a determination to profit by the experiences we have gone through, and avoiding a repetition of the many mistakes we have made, we can, as the men at the front did four years ago, ask ourselves, "Are we downhearted?" and in unison we can answer in thunder tones, "No!"

THE NEW CATALOG

Wait for our new beeware catalog before buying any bee supplies. There have been many changes in prices and equipment. The new catalog ought to reach you in a short time.

There will be many new articles listed, among which are: the new style metal spacers, which

do away with the objectionable features of the old ones; a metal frame shoulder or strengthener to prevent the end projections of a heavy comb from snapping off; an electrically heated uncapping knife; the new Lewis wax press; the Merkle extractor, which is a most wonderful and mechanically perfect machine; cartons for comb honey supers; "Honey For Sale" signs to nail up by the gate for passing tourists; a new queen rearing outfit; and in fact a whole lot of timely and valuable additions to beekeeping equipment.

THE HONEY BOOKS

Do not forget that the Honey Books issued cooperatively by the beekeepers of Texas, from the proceeds of a one cent per colony tax, are yours to use. They cost \$16.50 for 300 of them with your advertisement printed on three pages. 500 copies cost \$21.50. Any beekeeper can use them whether he paid in the tax or not. Their object is to popularize the use of honey. Ask for a sample.

METHODS OF HANDLING THE CROP

Aaron Sapiro certainly has a system which will sell any commodity which is produced in enormous quantities in a restricted territory and which comes to market within a limited period of time. In talking with Mr. Sapiro at College Station, Texas, he admitted that he had never studied out the problem of marketing a crop such as honey. When it is taken into consideration that honey is produced over such an enormous portion of the United States, and that the new crop is coming to market in almost every month, from March up to November, and that a large proportion of this honey is sold locally, it is seen that the problem is a complex one. He said, however, that he believed that his system for the sale of non-perishable products would be found extremely helpful in the marketing of honey, and suggested local associations or branch houses of a huge central association. We believe that the more one will study the honey situation that the better they will be pleased with the plan of the Texas Honey Producers Association. It certainly would be unjust to any member of our Association to prohibit him from selling to his neighbors and friends or to those from whom he had received as much or more than the Association is obtaining for the honey which they are selling. We have found that this As-

sociation has made friends and customers by allowing the members to continue and enlarge their local trade and to sell wherever they can do so better than with the Association. The members will agree that outside of the home trade they have always been able to do better by selling through the Association. If there is one thing which marks our Association, it is the loyalty of its members.

We believe that the new bonded warehouse arrangement will have all the good features of the western plan without the objections of tying up the cooperators with contracts.

A PRIMITIVE HIVE

Mr. Reginald Morris, of the Morris Ranch, brings us a branch of a tree on which a swarm of bees set up housekeeping. The bees had built three fair sized combs, when their owner discovered their hiding place and gave them a real home. These bees must have liked life in the open, for no sooner had the owner left the supposed-to-be-satisfied colony in its new hive than they left without giving formal notice or filing a forwarding address. Mr. Morris kindly brought us the branch with the combs adhering. It can be seen at the Association headquarters.

A SISTER ASSOCIATION

The Association members are certainly glad to see the way the association idea is being accepted by the beekeepers of the various states. We can sympathize with any new association and it gives us pleasure to know that these associations do not have to do the pioneering which was necessary for us. We have always felt a great deal of gratitude toward the Colorado Honey Producers Association, which was able to contribute so much of its experience for our benefit. We wish to congratulate the Mississippi and Yazoo Delta Association upon their excellent start and upon the firm foundation they are laying for their work. For the benefit of our members who are not acquainted with the Mississippi association, it is to be said that these men organized less than a year ago and have been very successful in obtaining customers and in marketing their crop of honey. Differing from the times in which our Association was organized, men have now learned that if they are to accomplish the results they must put some capital into the venture. This Mississippi association has gone at the work in a business-like way

and they have already accomplished a great deal in the way of organization. This association already owns blending tanks, registered labels and has established a trade in its special brand of honey. The Texas Honey Producers Association extends its congratulations to the Mississippi & Yazoo Delta Beekeepers Association.

PROBLEMS MORE THAN STATE-WIDE

Beekeepers organizations everywhere will find that they soon reach the place where they meet the limits of their territory, and immediately find that if they go farther they are no longer spending money in advertising or in the distribution of honey for themselves, but beekeepers outside of their association are taking advantage of the work of the associations. This fact has led to the organization of various associations into the American Honey Producers League. The League does not take away any of the rights or privileges, or in anyway bind any association to any agreement which would be detrimental to any association. Its sole purpose is to do the work which the individual association cannot do; namely, nation-wide advertising and over-sight of the distribution of honey and the caring for those other affairs which are of importance to beekeepers nationally. Every association, whether it contains a dozen or hundreds of beekeepers, cannot afford to be without affiliation in the League. At the second annual meeting of the League, which will be held January 30-31, at Salt Lake City, Utah, a number of associations will be accepted as new members, and every association in North America, and every individual beekeeper, is invited to send a representative to the meeting and to investigate the aims and objects of the League.

CANADA WAKES UP

F. Eric Millen, Dominion Apiarist, Guelph, Canada, writes us that the beekeepers of Ontario are very much interested in our Association work and will shortly organize such an association as the one we have. He has asked us for a copy of our constitution and by-laws, and for any information that would be for the good of an organization just organized.

In several of the states where beekeeping is only slightly developed or where, on account of conditions, only a few men can ever hope to keep bees, associations are being formed for

the purpose of obtaining bee fixtures at reasonable prices. These men have little or no marketing problem as their entire out-put of honey is consumed by the home trade. They, however, are so far from the beekeeping districts that the larger bee supply companies maintain no distributing point and these men have organized so that they can purchase goods in car load lots, saving freight and commission. Just such a condition has arisen in Western Texas and the adjoining counties of New Mexico. This Association has started a movement to organize these beekeepers as a sort of independent branch of this organization with the ultimate aim of serving the beekeepers of Arizona also.

WE ARE PLANTING THE SEED

The fact that organizations such as ours, and modelled upon our plan, are springing up in other places is not strange because many of our early members are scattered far and wide. W. H. Laws and Geo. Frame, members of our Association are now in Wyoming; C. S. Engle and Floyd Paddock are in Iowa; J. A. Grant has carried the message to Virginia; Carol Weber and Wm. Atchley are teachers to California; Frank Reed lives in Louisiana; W. C. Collier tells the story to Arizona; J. D. Walker instructs the beekeepers of New Mexico, and in the far off Indies, Dr. B. Maldonado, of Santo Domingo, gives the message to our tropical brethren.

THE HONEY MARKET REPORTS

The following statements have been taken from the various publications of the Bureau of Markets, dated December 3. In marked contrast to the slow movement of honey during November and December in 1920, is the brisk movement now on. Light crops of honey throughout many of the producing areas and failures in others have caused a rapid movement of honey into the new market territories. The advertising of the American League and state associations have caused a demand for honey in entirely new territory. A little honey remains in the hands of the producers and a large amount of the 1920 hold-over has been marketed. A slight falling off of the trade, owing to the holiday season, is becoming apparent, but there is an increase in the demand for fancy comb honey and small jars, suitable for holiday trade.

CALIFORNIA POINTS: The demand for honey has fallen off to some extent. Prices remain practically un-changed because of light supplies. Less than car load lots, white sage 11c, amber sage 8c, light amber alfalfa 6½c. Producers receiving 6½c for light amber alfalfa and there is a strong demand. Car load lots of Hawaiian honey are being quoted at San Francisco at from 4-6c. There is practically no market for bees wax. Heavy importation on the Atlantic Coast has stopped the Eastern demand. Large quantities of Hawaiian wax are being offered for sale. A large trade for honey has been developed among the producers with automobile tourists. The average price for light amber honey to this trade is 50c per quart can.

INTER-MOUNTAIN REGION: The demand is about normal but not so active as earlier in the season. Heavy shipments have absorbed most of the crop. Practically no honey remains in the hands of the producers. Prices of 7-8c per pound has been paid the producer for sweet clover and alfalfa.

EAST CENTRAL STATES: Most of the new crop is out of the hands of the producers. The demand is yet good. Large lots of extracted white clover selling at 10c. Small lots direct to the consumer in 5 and 10 pound pails have sold at from 20-25c. Throughout this section there is an increasing interest in co-operative marketing and the development of the home trade.

NORTH-EASTERN STATES: There was a heavy crop of dark fall honey. Extracted white clover is steady at from 9-10c in large lots, and 6-7c for buckwheat. The prices of New York comb honey is so low as to stop the usual eastward shipment of western honey.

SOUTH EASTERN STATES: No demand is being felt for the ordinary run of honey packed in large containers. There is a demand for white tupelo honey in large lots at 10-12c.

TELEGRAPHIC REPORTS FROM IMPORTANT MARKETS

BOSTON: 22,500 lbs. from Cuba and one car from Porto Rico, some comb honey from New York. The demand is light but the prices remain unchanged.

CINCINNATI: 4 car loads of western honey unpriced.

CHICAGO: 3 car loads of Western honey and 2 cars local. Movement of extracted is slightly improved and prices remain firm. Candy

and biscuit manufacturers are reported buying West India honey through New York.

MINNEAPOLIS: One car load Western honey. Demand and movements light but market steady. Mixed Western honey bringing 13-15c. Market steady with no new shipments. Bottlers, confectioneries, and bakers buying on spot. Alfalfa 8-8½c, white sage 11-12c, orange blossom 12-14c.

ST. LOUIS: 1 car Colorado arrived. No other honey on market. Demand moderate and price steady. Sales mostly to retailer. Mixed dark honeys 9-10c. California white 10-10½c.

BEES WAX MARKET

Bees wax, if anything, is lower in price. Heavy importations and the large amounts of native wax appearing on the market have a tendency to break down the prevailing price of 20-25c per pound.

BRITISH MARKET REPORT

HONEY: Since our last report there has been very little doing in Chilian honey. Stocks are getting gradually reduced and only about 150 barrels are now in first hands. The Coast is firmer and asks 35s. to 37s. CIF Continent or Liverpool. Buyers, however, cannot be found at this price. The prices on the spot are as follows: Pile X 50s. Pile 1 45s. per cwt. The value in American Currency is about 7½ to 8 cents per lb. for Extracted Honey.

BEESWAX. There has been very little doing during the past month. A little selected beeswax is selling on the spot at from £7 to £8 per cwt. and there are some buyers at £6.12.6. for CIF forward. The value per lb. at to-day's rate of exchange is therefore about 24 cents.

TAYLOR & CO.

Liverpool, England.

Beekeeping is attracting the attention of outsiders more and more, as evidenced by the frequency with which this subject is given in publications other than bee journals. In one of the recent numbers of "Texas of Today," a magazine published by the Tourists Bureau of San Antonio, Texas, appears a full page, illustrated article, calling attention to the importance of the beekeeping business in this state.

The Beekeepers Item, \$1.00 a year.

AMERICAN LEAGUE NOTES

Every beekeeper is invited to attend the Second Annual Meeting of the American Honey Producers League, which will be held at Salt Lake City, Utah, Jan. 30-31, 1922. The Utah Beekeepers are boosters for the League, and Messrs. Henager, Anderson, and Terriberry, their committee, promise the League a big time. Letters in response to invitations indicate a large attendance.

Frank Rauchfuss, of the Colorado Honey Producers Association, Denver, Colo., is Chairman of the Bureau of Standards. He will have ready for the consideration of the League, proposed standards for extracted and comb honey, and for tin and glass containers and cases.

The demand for the booklet, "Honey, How and When to Use It," is yet on the increase. Just at present there is a demand from beekeepers who sell their honey locally for lots of from 50 to 100 copies. Many wholesale houses have purchased them, and one firm states that the booklet aided them to a very great extent in selling two car loads of extracted honey. If any of the readers of this paper desire a copy of this booklet it may be had by sending a postal to the Secretary, American Honey Producers League, Box 838, San Antonio, Texas.

There seems to be some confusion regarding membership in the League. If you are a member of a State Association which holds membership in the League, you are a member of the League, and you are eligible to all of the benefits of the League.

A large proportion of the associations will hold their annual meetings previous to the annual meeting of the League, and every beekeeper is urged to attend their association meetings and to urge that their associations either hold or obtain membership in the League. The League has accomplished a great deal during its first year of work, and if the beekeepers will lend their support the League will be felt as a power in the market world before the end of the next season.

TEXAS MADE METAL COMBS

Note What Some Users of Texas Made Aluminum Honeycombs say:

I consider them a great success and cheaper in the long run than foundation.

T. A. ENGELS,
Mineral Point, Wisc.

I consider these combs a success here, and this is a cold climate.

JOHN SANTENS,
Hazelhurst, Pa.

The Aluminum comb is worth many times its cost. The only fault I have is my regret that I didn't use more.

ARCH G. NEWBERN,
Villa Rica, Ga.

No appreciable difference between them and wax combs. Raised brood just the same the first time used.

OSCAR C. MILLER,
1217 Ashland Block,
Chicago, Ill.

After being built out there is no difference in choice of wax combs over aluminum by the queen.

M. C. DAVIS,
Trimble, Ohio.

Four colonies provided with aluminum combs produced some surplus whereas we got very little from the others with wax combs.

LOWTHER BROS.,
Ferguson, Mo.

For extracting purposes I consider these combs ideal.

T. W. BURLESON,
Waxahachie, Texas.

Don't want anything better during a honey flow.

R. A. ARNOLD,
Woodward, Texas.

I believe the aluminum combs are the cheapest in the long run. They are here to stay for they are giving good results.

J. B. SANDERSON,
Fredericksburg, Ohio.

I like the aluminum comb very much and want to replace all the other combs with it.

THORNTON BOGERT,
Cincinnati, Ohio.

My frames were filled in eight days and I extracted 45 pounds of fine buckwheat honey from eight combs.

Wm. J. SHAFFER,
Waverly, N. Y.

Placed one frame in center of top body (over brood nest, and two on one side. The one in center was filled with eggs 24 hours after put in. Did not expect this as there were seven empty wax combs put on at same time.

ARNT. RONNING,
Alcester, So. Dak.

I put four combs of aluminum and four frames with full sheets of foundation in the hive at the same time. The queen layed a few eggs in the center of each comb and the bees put what little honey that was coming in around the outside of the comb before they ever started to work on the wax foundation."

OSCAR LEHMAN,
Menomonic, Wisc.

You Can Get The Same Results

Buy these combs from your regular dealer. Any bee supply dealers can furnish them. They are now carried in stock by the following:

IN THE EAST:

G. B. Lewis Company, Albany, N. Y.
Deroy Taylor Co., Newark, N. Y.
Fred W. Muth Co., Cincinnati, Ohio.
G. B. Lewis Co., Lynchburg, Va.

IN THE NORTH:

Dadant & Sons, Hamilton, Ill.
A. G. Woodman Co., Grand Rapids, Mich.
G. B. Lewis Co., Watertown, Wis.
Standard Lumber Co., Winona, Minn.
Minnesota Bee Supply Co., Minneapolis.

IN THE WEST:

Chas. H. Lilly's Co., Seattle, Wash and Branches.
Western Honey Producers, Sioux City, Iowa.
Colorado Honey Producers' Association, Denver, Colo.
B. F. Smith, Jr., Fromberg, Mont.
G. B. Lewis Co., Wichita, Kans.
Superior Honey Co., Oaden, Utah, and Riverside, Calif.

IN THE SOUTH:

J. J. Wilder, Waycross, Ga.
G. B. Lewis Co., Memphis, Tenn.
Texas Honey Producers' Association, San Antonio, Texas.
Crenshaw Bros. Seed Co., Tampa Fla.
Graham Mfg. Co., Greenville, Texas.

LOWER PRICES

For the season of 1922 the prices on Aluminum Honeycombs are greatly reduced.
Modified Dadant of Jumbo frames...60c each
Langstroth or Hoffman frames.....50c each
Shallow extracting, any style.....45c each

The above prices are f. o. b. factory or dealer's stock. Write to your dealer for quantity discounts on orders of 500 combs or over.

Be sure to buy the combs manufactured in Texas by.

The Aluminum Honeycomb Co. of Texas
San Antonio, Texas

CLASSIFIED WANT ADVERTISEMENTS

Rates in these columns are 15 cents a line. Minimum charge will be 50 cents. When sending advertisements for this department it must be so stated or we will not be responsible for errors.

BEES AND QUEENS

THREE BAND ITALIANS ONLY—Output over 8,000 queens a year. Selected Untested, one \$1.50; 6, \$7.50; 12, \$13.50; 50, \$55; 100, \$100. Safe arrival I guarantee; booking orders now. H. G. Dunn, The Willows, San Jose, Calif.

BEES BY THE POUND, ALSO QUEENS—Booking orders now. Free circular gives prices, etc. See large ad. elsewhere. Nueces County Apiaries, E. B. Ault, Proprietor, Calallen, Texas.

FOR SALE—1400 colonies of bees and equipment. 10 locations extending from El Paso, Texas, 25 miles north in New Mexico. If interested ask for further information. Mesilla Valley Honey Co., Canutillo, Texas.

PHELPS' GOLDEN ITALIAN QUEENS combine the qualities you want. They are **GREAT HONEY-GATHERERS, BEAUTIFUL, and GENTLE.** Virgins, \$1.00; mated \$2.00; 6 for \$10.00, or \$18.00 per dozen; tested, \$5.00. Breeders, \$10 to \$20. Safe arrival guaranteed only in the U. S. and Canada. C. W. Phelps & Son, Binghamton, N. Y.

LEATHER-COLORED queens and package bees. If you want a hive full of bees that gets the honey and stays clean of European Foul Brood, try some of our queens. Booking orders now for 1922 delivery. Blossom-Kissed Honey-Bee Company, El Monte, California.

PHELPS' GOLDEN QUEENS will please you. Mated, \$2.00; 6, \$10.00; or \$18.00 a dozen. C. W. Phelps & Son, Binghamton, N. Y.

SELECT QUEENS ONLY—Choice three-band Italians, tested, \$2.50; untested, \$1.25. Also, few Carniolans. George W. Coltrin and Son, Mathis, Texas.

GOLDEN BEAUTIES and the Famous 3-band Italian queens. Tested, \$1.25, untested, \$1.00. No discount on large orders. Safe delivery and healthy stock guaranteed. C. B. Bankston, Buffalo, Texas.

ARIZONA QUEENS—Immediate delivery \$1.00 to \$3.00, exceptional strain. Pound bees. Arizona Apiary, Clifton, Arizona.

SAVE QUEENS—Push in Comb Queen Introducing Cage, 25c postpaid. Try it. Safest way known. O. G. Rexford, Winsted, Conn.

BEES AND QUEENS

WE WILL NOW commence booking your early spring orders for package bees and Italian queens, bred especially for the production of honey. Prices will be in accord with the reduction in material and labor. Safe arrival guaranteed. Write for prices and terms. **SARASOTA BEE CO.,** Sarasota, Florida.

FOR SALE—Our bright Italian queens. Untested, \$1.00 each, \$10.00 per dozen or \$75.00 per 100. Safe arrival, pure mating and reasonable satisfaction guaranteed in U. S. or Canada. If you want quick service and fine queens send us your orders with remittance covering same and see how quick we can please you. **GRAYDON BROS.,** Rt. 4, Greenville, Alabama.

CHOICE QUEENS—The kind that are better. Select tested, \$2.50; select untested, \$1.25. Carniolans same price. Geo. W. Coltrin and Son, Mathis, Texas.

BEES WANTED—Have sixty-acre farm Henderson County to trade good bee location, also fruit. Terms on balance. E. B. Ault, Calallen, Texas.

BEES FOR SALE—50 colonies bees in 10 frame, one and a half stories hive. In tip-top condition to go through winter. \$10.00 per colony. Write, Pat Burkett, Floresville, Texas.

WANT TO SELL—25 colonies of three banded Italian Bees all in fairly good condition No disease. A. E. HINZE, R-1, Box 66, Eddy, Texas.

QUEENS—From my old reliable leather back Italian queen noted for her long tongue and short stinger. Will begin shipping April 15th. 1 untested, \$1.25; 1 select untested, \$2.50; 1 select tested, \$3.00. Above 12 price on application. O. O. Wilder & Son, R. 2, Corpus Christi, Texas.

QUEENS, PACKAGE BEES AND NUCLEI—Booking orders for 1922 delivery begin shipping March 15th. We breed the very best. 1 untested queen \$1.50; 1 select untested \$1.70; 1 tested \$2.50; 1 select tested \$3.00. 2 pound package bees parcel post prepaid \$4.80. By express f.o.b. Sandia, Texas, One 2 pound \$3.75, 25 or more \$2.60. 2 comb regular nuclei, \$3.75. Add price of queen wanted with package bees less 25 cents a queen. Circulars free of our pedigreed strain of queens and bees sent on request. Dr. White Bee Co., Sandia, Texas.

BEES AND QUEENS

WHEN it's GOLDEN, its **PHELPS**. C. W. Phelps & Son, Binghamton, N. Y.

THREE BAND, packages, bees queens and nuclei. April and May delivery. Special orders solicited. Write for prices and terms. Safe arrival and satisfaction guaranteed. Tupelo Honey Co., Columbia, Ala.

NEW 1922 PRICES—On account of the present price of honey and recent reductions in the price of supplies we are now booking orders for our three band leather-colored italians at the following low prices: 2-lb. packages of bees, no queen, \$4.00; Untested queen, \$1.25; 12, \$13.50. Select untested, \$1.50; 12, \$15.00; tested, \$2.25; 12, \$20.00 No disease. Safe arrival in U. S. and Canada and satisfaction guaranteed. Write for circular and prices on quantities. J. M. Cutts & Son, R. F. D. No. 1, Montgomery, Ala.

FOR SALE—200 colonies Italian bees in two-story 10-frame dovetailed hives. No disease. Heavy, modern and in A-1 condition. H. A. Jett, Rt. 1, Box 155, Tucson, Ariz.

GOLDEN ITALIANS—2 lb. packages and untested queens. Delivery guaranteed. Money returned at once if not able to fill order. Untested queens. \$1.50; tested \$2.50. J. E. Sutton, Linden, Alabama.

SPECIAL NOTICES

HONEY LABELS—New designs. Catalog free. Eastern Label Co., Clintonville, Conn.

BEE BOOKS WANTED—On account of frequent inquiries we have decided to buy and sell for our readers such bee books and journals as they may have to offer or wish to buy. The Beekeepers' Item, New Braunfels, Texas.

TYPEWRITERS

REAL values in second-hand and rebuilt typewriters, a guarantee of satisfaction with each purchase.

Remington No. 10	\$35.00
Oliver No. 5	27.50
L. C. Smith No. 2 back spacer ..	37.50
Underwood back spacer	47.50
Remington No. 6	15.00

These machines are guaranteed in perfect working order and if not so may be returned. Corona and L. C. Smith, sole factory dealer. A. F. BEYER, 310 West Commerce Street, San Antonio, Texas.

SEEDS AND PLANTS

FOR SALE—Annual white sweet clover seed. Blooms in ninety days. Will grow from 5 to 6 feet high under favorable conditions. Limited amount at 25c per oz. Ed Plumbhoff, Waxahachie, Texas.

HUBAM—The new annual sweet clover, the greatest of all, honey forage and fertilizer plants. We offer hulled and scarified seed at \$2.00 per lb. while they last. L. H. Terry, Mesquite, Texas.

HUBAM—Annual White Sweet Clover Seed. Guaranteed genuine. Cleaned, hulled and scarified. \$2 per pound, prepaid. Write for prices on quantities. Blair Brothers, Route 4, Ames, Iowa.

SWEET CLOVER hullers and scarifiers combined, hulls and scarifies at the same time. Satisfaction guaranteed or your money returned. Price: \$3.50 each, postage extra. Sterling Rouse, R. F. D. 2, Ludlow, Kentucky.

USE OUR CLASSIFIED ADS

AUTOMOBILE REPAIRS

AUTOMOBILE OWNERS should subscribe for the **AUTOMOBILE DEALER & REPAIRER**; 150-page illustrated monthly devoted exclusively to the care and repair of the car. The most practical magazine for beekeepers who own automobiles or gasoline engines. The "Trouble Department" contains five pages of numbered questions each month from car owners and repairmen which are answered by experts on gasoline engine repairs. \$1.50 per year; 15 cents per copy. Postals not answered. Charles D. Sherman, 106 Highland Court, Hartford, Conn.

MISCELLANEOUS.

AIREDALE TERRIERS — Choice strains bred only. I make a specialty of such strains as "King Corang 11", "Black Raven Corang," "International Ch.," "Kootenai Chinook," "Colne Renown." Best strains in the U. S. A. **THE AIREDALE KENNELS, GLENWOOD, MICHIGAN.**

RHODE ISLAND REDS—Cockerels of heavy winter laying strain, \$5.00 each. If not satisfied return them and your money will be gladly refunded. Walter Weinert, Seguin, Texas.

R. I. REDS—Have a lot of big pure Rhode Island Red cockerels at \$5 a piece to offer for quick sale. The Louis H. Scholl Poultry Yards, New Braunfels, Texas.

WANTED—To buy live snakes, live animals, pets of all kinds. For prices, address W. Odell Learn & Co., 504 Dolorosa St., San Antonio, Texas.

HONEY AND WAX.

GRANULATED HONEY SLIPS—100, 20c. 1,000, \$1.50. They save honey and money. By mail, postage paid. Dr. Bonney, Buck Grove, Iowa.

OLD COMB—Don't throw away your old combs. Save them up and ship to us. We will get a lot of wax out of them for you and pay you market price for it or make them into foundation for you. Write for rates. Dadant and Sons, Hamilton, Illinois.

DARK EXTRACTED HONEY—Can use some off grades or dark extracted honey of otherwise good quality at low price. Send samples, and write size of packages, quantity, and lowest price wanted, all in first letter. The Louis H. Scholl Apiaries, New Braunfels, Texas.

BEE SUPPLIES

WHEN IN NEED of bee supplies, comb, foundation, etc., always get our prices before ordering. Send us your slum gum to be rendered for you—the best results obtained. Miller Box Mfg. Co., 233 N. Avenue Eighteen, Los Angeles, Calif.

WESTERN BEEKEEPERS—We can demonstrate that you can save money on buying bee supplies of best quality. Write for our latest price list. The Colorado Honey Producers' Association, Denver, Colo.

PATENT FOR SALE—New Beehive patent, February 22, 1921. The one who will be pleased with it may write to this address. Dmytro Podhajny, Box 11, Algoma, W. Va.

FOR SALE—100 lbs. New Medium Brood foundation Dadant make, 65c per lb. 200 absolutely new 110 frame hives complete, Hoffman frames, K. D. Grate of five \$10. Hives made of best grade cypress. A. R. Irish, Ludowici, Ga.

HIVE BODIES—We have some ten frame, white pine, dovetailed hive bodies, painted white, with Hoffman frames, about 200, to offer. Write for price. The Louis H. Scholl Apiaries, New Braunfels, Texas.

POSITIONS WANTED.

POSITION WANTED—Experienced beekeeper desires a place in apiary work for the season. Queen rearing experience. Can furnish references. J. F. Warmuth, Calallen, Texas.

TRY THEM—These classified want ads. Others say they are "result getters," why not for you? Fifteen cents a line—the cheapest way to let others know what you have or what you want

Extracted Honey Wanted

Must be of good quality and flavor. State size of containers, source of honey and send sample. Price wanted must be stated, all in first letter.

THE LOUIS H. SCHOLL APIARIES
New Braunfels, Texas

What Our Subscribers Say

In determining the merits and popularity of a publication there is nothing that goes farther in establishing this than the vast number of unsolicited testimonials from the readers themselves. These have been so numerous that only a few appear in this space. But even these will serve to show how well they like their bee journal.

Enclosed find one dollar (\$1.00) for which please extend my subscription to The Beekeepers Item for one year. Am glad to note the growth of your valuable bee paper.
Seguin, Texas. GLENN M. ANDERSON.

To be sure we do not want to be without The Beekeepers Item in its new dress even if it was \$1.50 per year. So kindly mark us up in full for 1921. Wishing the Item and its staff all success for a bright 1921.
Barstow, Texas. J. W. BARSHAM.

Enclosed find check for \$1.50 to pay for my subscription for 1920 and 1921. Excuse delay in re-mitting. I received the January copy of The Beekeepers Item in its new dress and I like it just fine. The size of the pages in the old dress was the only thing that did not just suit me. Since the pages have been changed to the new size it will be liked by everyone who sees it.
Pandora, Texas. FRITZ BOHNE.

I am sending check for \$2.00 to pay past dues on your splendid little journal.
Buffalo, Texas. C. B. BANKSTON...

Enclosed find Cashier's check for \$1.00 to extend my subscription to the Item. I like the new journal, and with best wishes for the new publication, I am,
Glennville, Georgia. W. C. BARNARD.

Enclosed please find one-fifty, fifty cents for last year's subscription and one dollar for 1921. We think the new Item is fine, worth the dollar you ask for it.
Roxton, Texas. E. W. COTHRAN.

Am enclosing check for amount due you. Many thanks for continuing to send my paper. I think the magazine form is much nicer. We enjoy the "Item" very much and find much interest as well as information. With best wishes, I am,
Moore, Texas. B. F. CUDE.

Enclosed please find one dollar to pay up my subscription to the Item for another year. My subscription expired with the February issue, and you have been kind enough to send it since then, and I am truly sorry I did not attend to it before. I like the Item very much in its new form and hope you have good success with it.

Again thanking you, I remain,
Shirland, Illinois. FLOYD F. FISHER.

Are you one of our subscription family?
Now is the time to join at only a dollar a year; or by some of the clubbing offers in this issue.

Enclosed find money order for \$2.50 for renewal to The Beekeepers Item and American Bee Journal, and fifty cents for Dr. Miller memorial fund. I know there is no beekeeper that thought more of Dr. Miller than I did.

I am well pleased with the change in the Item and think it will be worth the difference in price. Things look good for a honey crop this year, horsemint is good and bees in fine shape.
Yours for better beekeeping,
Corsicana, Texas. S. O. GORDON.

Enclosed find 25 cents in stamps to cover my subscription to January 1st, 1922. I am glad to pay, as I am always glad to get my next copy of The Beekeepers Item.
Venus, Texas. JEAN HORNBUCKLE.

Please find enclosed P. O. Money Order for 50c for which extend my subscription to your valuable (little but loud) bee magazine to January 1922 and oblige. Bees swarmed very early here this season, some being caught the latter part of March.
LaGrange, Texas. AUGUST HERMES.

Enclosed please find my check for \$1.00 in renewal of my subscription for 1921. The Item in its new form shows a decided advance over last year.
Waldoboro, Maine. JOHN C. LOVELL.

I am enclosing \$1.00 to renew my subscription to The Beekeepers Item. It is real sprightly looking in its new dress and anyway I like it and want to associate with it another year.
Centerville, Texas. W. W. LOWRANCE.

I have received your February Number as a sample copy. You seem to have a real bee magazine and I enclose \$1.00 for subscription.

I would like to have the January number also so that I can keep the volume for binding.

Do not forget the March number which I suppose is also out.
Nemours, W. Va. F. B. LAMBERT.

Enclosed please find check for \$2.00 to cover subscription to your valuable paper for E. B. Ault and H. D. Murry.

We are much pleased with the new form of the paper and wish you much success with it. Don't see how Texas beekeepers ever got along without a paper of their own. Certainly we need it now, and The Item just fits the need.
Calallen, Texas. NUECES COUNTY APIARI

THE BEEKEEPERS ITEM :: New Braunfels, Texas

Used Honey Cans

Good, used honey cans, clean and in good condition. We have some to offer, f. o. b. here, at \$1.00 per case of 2-60 lbs. cans. These will cost you much more new.

**The Louis H. Scholl
Apiaries**

NEW BRAUNFELS, TEXAS

SELECT QUEENS.

**Select Three Banded and
Golden Italians and
Carniolans.**

Greatest Possible Care in Matings
Honest, Conscientious Testing.

Select Untested, Each----\$1.25

Select Tested, Each-----\$2.50

Choice Breeders and also cheaper
Utility Queens priced on applica-
tion.

Geo. W. Coltrin & Son
Mathis, Texas.

BEEKEEPING IN THE SOUTH

The new 125 page bee book by Kenneth Hawkins, formerly extension agent in the South for the U. S. Department of Agriculture, now with the G. B. Lewis Company at Watertown, Wisconsin.

A clear concise explanation of beekeeping in the South well illustrated by many original photographs.

The book is cloth bound and printed on excellent paper.

Price of the book alone \$1.25, postage extra. (Mailing weight one pound.)

May be had in combination with a one year subscription to The American Bee Journal (new or renewal.)

Both for only \$2.50 postpaid.

Send orders to—

AMERICAN BEE JOURNAL, Hamilton, Ill.

BEEKEEPING BOOKS

Any of the following may be clubbed with The Beekeepers Item by adding 75 cents to the price of the book.

First Lessons in Beekeeping, by C. P. Dadant. 167 pages, 178 illustrations, Cloth \$1.00.
 Beginners Bee Book, by Frank C. Pellett. 179 pages, illustrated. Cloth \$1.25.
 The Honey Bee, by Langstroth and Dadant. 575 pages, 229 illustrations. Cloth \$2.50.
 Productive Beekeeping, by Frank C. Pellett. 326 pages, 134 illustrations Cloth \$2.50.
 Dadant System of Beekeeping, by C. P. Dadant. 118 pages, 58 illustrations. Cloth \$1.00.
 Out Apiaries, by M. G. Dadant. 135 pages. 50 illustrations. Cloth \$1.00.
 Practical Queen Rearing, by F. C. Pellett. 105 pages, 40 illustrations. \$1.00.
 American Honey Plants, by F. C. Pellett. 300 large pages, 155 illustrations. \$2.50
 Thousand Answers to Beekeeping Questions, by C. C. Miller, 276 pages, illustrated. Cloth \$1.25.
 Beekeeping in the South, by Kenneth Hawks. 120 pages, 58 illustrations. Cloth. \$1.25.
 Send all orders and remittances to—

THE BEEKEEPER'S ITEM
New Braunfels, Texas

Dark Extracted Honey

We have a demand for some dark extracted honey, but must be of good flavor and low enough in price. Please send samples and be sure to write price wanted f.o.b. your shipping station.

The LOUIS H. SCHOLL APIARIES
 New Braunfels, Texas

Old Bee Books and Bee Journals

The editor of this journal is interested in old bee books and complete volumes of bee journals of all kinds, to add to his present library. If you have any to offer kindly write him.

Will Pay for Them

Send him a complete list with a full description of what it is and in what kind of condition and your lowest price. Remember that we do not ask them for nothing but will pay a reasonable price for any books or journals, or other published matter on beekeeping, that we can use.

The Beekeepers Item
New Braunfels, Texas



Beekeepers' Supplies

We manufacture and have ready for immediate shipment, hives, frames, foundation and all supplies for the bee keeper.

Langstroth brood frames,
per 100 ----- \$5.00

Langstroth super frames,
per 100 ----- \$4.00

Catalogue and Price List for 1921
now ready.

Write Today

GRAHAM MFG. CO.
GREENVILLE, TEXAS.

STANDARD PRINTING COMPANY

(Successors to Wilson-Schwegmann)

Printers, Blank-Book Manufacturers
English, German, Spanish

We Print The Texas Honey Producers Association Special Letter Heads for Members.

Also Other Stationery.

206 Navarro Street, San Antonio, Texas



Attention: Texas Beekeepers

Do you know Carl F. Buck of Augusta, Kansas, makes the very best Weed Process Comb Foundation in the country? And the freight to his factory is less And his price for working wax and selling foundation are very low? And he pays the best prices for beeswax. Write him. His address is

CARL F. BUCK

Established 1889. AUGUSTA, KANSAS.

W. Odell Learn & Co.

500 Dolorosa Street, San Antonio, Texas.
Buy All Kinds of

LIVE SNAKES AND ANIMALS.
BEST PRICES PAID.

WALL PAPER, WINDOW GLASS

Harrison's Town and Country
Paint, Artists' Material

Let us figure on your needs of Bee Hive and
Other Painting.

Prompt attention to out-of-town orders.

FRED HUMMERT

204-6-8 W. Commerce St.

San Antonio, - - - - - Texas

FERD STAFFEL

ESTABLISHED 1890

San Antonio's Largest Seed, Feed and
Poultry Supply House

Queen's and Cypher's
Incubators,
Brooders and Hovers.

Write Us for Prices

Main Store, 321 E. Commerce St.

SAN ANTONIO, - - - - - TEXAS

Used Honey Cans

Good, used honey cans, clean and in good condition. We have some to offer, f. o. b. here, at \$1.00 per case of 2-60 lbs. cans. These will cost you much more new.

**The Louis H. Scholl
Apiaries**

NEW BRAUNFELS, TEXAS

Dark Extracted Honey



We have a demand for some dark extracted honey, but must be of good flavor and low enough in price. Please send samples and be sure to write price wanted f.o.b. your shipping station.



The LOUIS H. SCHOLL APIARIES
New Braunfels, Texas

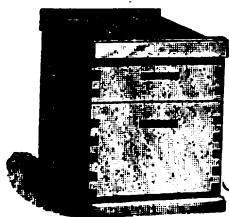
SHARES OF STOCK FOR SALE

On account of a change in business party offers a limited number in one of the strongest cooperative honey producers associations in the country, in blocks of five \$10 shares, bearing interest at 8 per cent and entitling full membership and all other privileges in the organization. Those wishing to purchase write for particulars to

THE BEEKEEPERS ITEM

NEW BRAUNFELS, TEXAS

MR. BEEKEEPER---

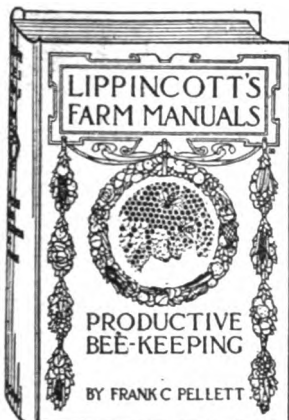


We have a large plant especially equipped to manufacture the supplies that you use. We guarantee all materials and workmanship. We ship anywhere. We allow early order discounts and make prompt shipments. *Write for free illustrated catalog today.*

We Pay the Highest Cash or Trade Prices for Beeswax.

LEAHY MFG CO. 80 6th Street, Higginsville, Mo.

Texas Beekeepers Should Write to A. M. Hunt Goldthwaite, Texas



"PRODUCTIVE BEEKEEPING"

By Frank C. Pellet

One of Lippincott's "Farm Manual" Series, this book of 326 pages is finely gotten up, finely bound, and has 134 illustrations, nearly all original with the author. Price \$2.50

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| 3. Making a Start With Bees | 10. Production of Extracted Honey |
| 4. Arrangement of the Apiary | 11. Wax—A By-Product of the Apiary |
| 5. Sources of Nectar | 12. Diseases and Enemies of Bees |
| 6. The Occupants of the Hive | 13. Wintering |
| 7. Increase | 14. Marketing the Honey Crop |
| 15. Laws That Concern the Beekeeper | |

Clubbed with The Beekeepers Item, One Year, Postpaid, \$3.25
Send All Orders to The Beekeepers Item, New Braunfels, Tex.

Are You Interested in Farming?

You will want to read the farm paper published by the editor of your bee paper. You will find it an excellent medium on agricultural affairs.

Scholl's Monthly Farmer

LOUIS H. SCHOLL, Editor

It is a farm and home paper, of interest to every member of the family, in country or town. It has departments on the household, boys and girls, bees, poultry and fruit etc. You will appreciate it.

Subscription price only 50 cents a year. With THE BEEKEEPERS' ITEM \$1.25 a year.

Scholl's Monthly Farmer, New Braunfels, Texas

WILL SELL AT WHOLESALE



A Big Stock of Bee Supplies

ALL BOXED, ready to ship at once—thousands of Hoffman Frames; also Jumbo and Shallow Frames of all kinds—100 and 200 in a box. Big stock of Sections and fine polished Dovetailed Hives and Supers. Send for a price list. I can save you money.

Will take your Beeswax in Trade at Highest Market Price.

CHAS. MONDENG

159 Cedar Lake Road

MINNEAPOLIS, MINN.

Pellett's Practical Queen - Rearing

BY FRANK C. PELLETT

To get the best honey yields it is necessary to have good queens in your colonies. No matter how good your ability to care for the bees, how well adapted your hives, nor whether the honey flow may be abundant, the colonies will not give best results unless they are in first-class condition and strong in number of bees. This will depend upon the kind of a queen in the hive.

This new work on queen rearing methods should be in the hands of every beekeeper whether he owns a few or many colonies.

All the leading practical queen rearing methods are discussed in a plain manner so every reader can understand them. The book is worth many times its price.

You Need A Copy -- Order It To-Day

Arrangements have been made whereby a copy can be obtained with a club subscription to this publication. Price \$1.00, with The Beekeepers Item, the year, both \$1.75.

SEND ORDERS TO

The Beekeeper's Item

New Braunfels, Texas

The NOVEMBER-DECEMBER, 1921
Beekeepers
A Small Item In Itself.
A Big Item For Beekeepers **Item**



LOUIS H. SCHOLL, Editor and Publisher
New Braunfels, Texas

Prepare for 1922 Now

The late honey flows have allowed the bees to go into winter quarters in fine shape. The rains give assurance that the honey plants will be in good condition in the spring. Reports from all parts of the state would indicate that there will be an early and abundant honey flow.

You know the returns you get from that early honey. Are you ready to get the crop? Bulk comb honey will be in great demand. Have you a supply of foundation? To pack the comb you need extracted honey. Is your extractor in shape? This flow comes all at once and is very heavy. Have you drawn combs sufficient for storage?

Our new catalog will soon be in your hands. Don't put off buying your supplies until the flow starts. Bees and honey wait for no man. In our catalog we are listing your favorite line of

LEWIS BEEWARE

You know what that means; every article true to reputation. We are listing the new Lewis-Merkel Extractor, the machine that is made right, will handle any sized frames, and has gears that will never slip or break. It gives the true Beeware service.

The price of wax is low but we are working it and at a lower rate. Send in your wax and have it made into

DADANT FOUNDATION

the best comb foundation on earth.

Do not lose the early honey flows while your bees are drawing new combs. We have the Texas made

ALUMINUM HONEY COMB

in the standard sizes, all ready for the bees to store honey in. Get them and get that extra honey. Many who have used them last year say they got enough extra honey to more than pay their cost.

Send in an estimate of your wants and get our prices on your whole bee supply list.

You will have time to read these winter evenings. Let us send you prices on bee papers and books. Sample copies of the American Bee Journal, Dixie Beekeeper, and Beekeepers Item will be sent on request.

Texas Honey Producers Association

P. O. Box 1048

1105 S. Flores Street

SAN ANTONIO, TEXAS

Cypress Bee Supplies at Jobbing Prices



On account of having no agency in Texas we are offering direct to TEXAS BEEKEEPERS superior cypress bee supplies at JOBBING PRICES if ordered in large lots. Will make your supplies to your special order. Send us list of your needs in HIVES, SUPERS, BOTTOMS, COVERS, FRAMES, FOUNDATION, SECTIONS AND SHIPPING CASES. We will quote you special price.

A Rare Fall Bargain

REPLACE ALL OLD COVERS AND GIVE YOUR BEES A NEW ROOF. THE BEST WOOD COVER MADE IN EIGHT FRAME SIZE ONLY AT ONLY 50 CENTS EACH. ONE PIECE CYPRESS BOARD WITH END RAILS ONE INCH THICK, PACKED IN CRATES OF FIVE.

If not familiar with our goods order a sample and if not satisfactory, we will take it back and see that you lose nothing.

ITALIAN QUEENS

One, \$1.00 Twelve or More 75c Each

THE STOVER APIARIES

HELENA, GA.

MAYHEW, MISS.

WILL SELL AT WHOLESALE



A Big Stock of Bee Supplies

ALL BOXED, ready to ship at once—thousands of Hoffman Frames; also Jumbo and Shallow Frames of all kinds—100 and 200 in a box. Big stock of Sections and fine polished Dovetailed Hives and Supers. Send for a price list. I can save you money.

Will take your Beeswax in Trade at Highest Market Price.

CHAS. MONDENG

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To get the best honey yields it is necessary to have good queens in your colonies. No matter how good your ability to care for the bees, how well adapted your hives, nor whether the honey flow may be abundant, the colonies will not give best results unless they are in first-class condition and strong in number of bees. This will depend upon the kind of a queen in the hive.

This new work on queen rearing methods should be in the hands of every beekeeper whether he owns a few or many colonies.

All the leading practical queen rearing methods are discussed in a plain manner so every reader can understand them. The book is worth many times its price.

You Need A Copy -- Order It To-Day

Arrangements have been made whereby a copy can be obtained with a club subscription to this publication. Price \$1.00, with The Beekeepers Item, the year, both \$1.75.

SEND ORDERS TO

The Beekeeper's Item

New Braunfels, Texas

AIRCO Comb Foundation

NOW MADE IN SAN ANTONIO

We have recently installed a new and complete set of machinery for working your wax into AIRCO foundation. Below we list our wax working prices.

No Discounts from These Prices

Brood Foundation			Medium		Light		Super Foundation		Thin		Extra Thin	
5 to	10	pounds	37	cents per pound	41	cents per pound	45	cents per pound	49	cents per pound		
11 to	25	"	34	"	38	"	42	"	46	"	"	"
26 to	50	"	32	"	34	"	38	"	41	"	"	"
51 to	100	"	27	"	29	"	33	"	36	"	"	"
101 to	300	"	23	"	25	"	26	"	28	"	"	"
301 to	500	"	20	"	22	"	24	"	25	"	"	"

Add 2 cents a pound for packing in assorted or 5 pound cartons.
Add 5 cents a pound for packing all in 1 pound cartons.

THE A. I. ROOT COMPANY OF TEXAS

537 South Flores St.

San Antonio, Texas

If you want the cheapest, buy the best. I am offering to the trade of 1922 Nuclei, Nuclei and more Nuclei

Let me prove to you that one of my 3-frame nuclei is worth more to you than a 2 or 3 pound package; besides, they cost you less.

1st. One of my 3-frame nuclei is equal to a swarm of bees, as you get young bees and brood in all stages, and the queen laying enroute.

2nd. There is no trouble about transferring them, and the bees are fresh and not worn out from fretting as they are in pound packages.

3rd. The purchaser has an absolute guarantee that they will arrive in good condition.

4th. The three combs, if empty, are worth more than the difference in the price of freight. Last season I shipped over eighteen hundred nuclei, with a loss of only two. Can the pound package shipper give such a record?

Read what one of my costumers says: St. Thomas, Virgin Island, U. S. A., June 21, 1921. Mr. A. B. Marchant, Jesup, Ga. Dear Sir: "The four three-frame nuclei arrived today in perfect order, only stores were gone, and they could not have lasted a day longer, as they were on the road 28 days." Sincerely yours, Axel Holst. The above settles the question as to safe arrival.

Now a few words about my frames and combs. My frames are genuine Hoffman wired, with shoulders cut at each end of the end bars, which makes them fit square and even.

My combs are drawn from full sheets of the famous Dadant foundation. There is none so good.

My shipping facilities are the best, having twenty or more express trains every twenty-four hours. Some of them going to New York or other points without a change.

Prices of my three-frame nuclei, with a select untested queen, \$5.50 each. Ten per cent cash with order to show good faith, balance any time before shipping.

Should a customer become dissatisfied and we can not adjust the matter, then send your claim to THE BEEKEEPERS ITEM and I will abide by whatever they do.

My bees are all bright three-banded Italians. A great many breeders call them goldens.

To those that have weak colonies and wish to build them up, I can furnish nuclei without queens from 15 to 20 days earlier, price \$5.00 each.

I can also furnish full colonies in 8 and 10-frame hives; prices quoted on application. Shipping season depends on the weather, usually begins April 15th.

I can load a car in 48 hours, as I have over 1,000 colonies to draw from.

My Guarantee: Safe arrival in U. S. and Canada, free from disease, pure stock of Italians, quick and prompt service, and a satisfied customer.

THE NUCLEI MAN. Reference: THE BRUNSWICK BANK & TRUST CO. Jesup, Georgia

A. B. MARCHANT, JESUP, GEORGIA

Package Bees for 1922

*We Specialize on Three-band Italians
Bred for Business*

A 2-pound package of our hustlers with a select untested queen for \$5; 25 or more, \$4.75 each. Special prices on large lots. One-fifth cash books your order. Order early and make sure of shipping date. We do not accept more orders than we can fill promptly.



CANEY VALLEY APIARIES

J. D. YANCEY, Mgr.
Bay City, Texas

Beekeepers Supplies

LANGSTROTH HIVES

In Lots of Five Complete with Frames
Knocked Down

8 Fr.	10 Fr.
1 story \$7.75	\$ 8.75
1½ story 10.50	11.75
2 story 12.25	13.50

REGULAR HOFFMAN FRAMES
\$4.00 per Hundred \$37.50 per Thousand

SHALLOW IDEAL FRAMES
\$3.00 per Hundred \$28.00 per Thousand

THREE BANDED ITALIAN BEES

2 frame Nuclei after April 10th \$3.75
Add \$1.25 for Untested Queen if wanted

E. G. LEWIS

Beeville Box 575 Texas

QUEENS

Package Bees, Nuclei and Full Colonies

QUEENS

Just received a letter from a queen breeder in France stating that his queen arrived all right after 21 days on the road, and that he used her for a breeder. He thanked me for sending him a \$100.00 queen for \$5.00 and says he has bought dozens of queens from prominent breeders in Italy and she beats them all. His customers that bought her daughters have all ordered for 1922. Have scores of other testimonials. The cheapest in the long run is to buy the best.

Untested \$1.50 each; 25 or more \$1.30	Select Tested \$2.65 each; 25 or more \$2.25
Select Unt. \$1.70 each; 25 or more \$1.50	1 lb. of bees \$2.25 each; 25 or more \$2.15
Tested .....\$2.25 each; 25 or more \$2.00	2 lbs. of bees \$3.75 each; 25 or more \$3.60
3 lbs. of bees \$5.25 each, 25 or more \$5.00	

Add price of queen wanted when ordering bees.

Safe arrival guaranteed in U. S. A. and Canada. Have never had any foul brood.

Sold one party over 2000 queens last year and have his order again for this year for still more.

NUECES COUNTY APIARIES

E. B. Ault, Prop.

Calallen, Texas

HEAVY LAYING QUEENS

High grade Italians bred for honey production. They are large prolific, gentle, and the best for honey gathering. A trial will make you a customer. I breed only the best and guarantee perfect satisfaction and safe delivery in U. S. and Canada.

Untested, 75c Tested, \$1.50
Beeswax 30c lb. on orders.

Ulis Blalock
Christine, Texas

Let Us Tell You About the California Gold Medal Queens—the Queens With a Pedigree

Our hardy, immune, prolific strain of 3-banded leather colored Italians. Developed from the world's best strain by careful selection and tested under California conditions for five years, with excellent results. My specialty will be breeding stock and every queen produced will receive my personal care and inspection. Now receiving orders for the season of 1922, which will be filled in the order of their receipt.

Write for catalog and prices.

THE COLEMAN APIARIES

GEO. A. COLEMAN, Prop.
2649 Russell St. Berkeley, Calif.

EAGLE "MIKADO" PENCIL No. 174



For Sale at Your Dealers

Made in Five Grades

ASK FOR THE YELLOW PENCIL WITH THE RED BAND
EAGLE MIKADO

EAGLE PENCIL COMPANY

NEW YORK

THE OLD RELIABLE THREE-BANDED QUEENS--- BOOKING ORDERS NOW FOR 1922 QUEENS READY APRIL 1

Our Italians are of an exceptionally vigorous and long-lived strain of bees. They are gentle, prolific, very resistant to foul brood, and the best honey-gatherers. We have sold a good many queens to parties who are using them in stamping out foul brood. Orders booked for one-fourth cash, balance before delivery. Safe arrival guaranteed. Circular and price list free.

PRICES APRIL, MAY AND JUNE:

Untested ----- \$1.25 each; 25 or more, \$1.00 each
Select Unt ----- \$1.50 each; 25 or more, \$1.25 each
Tested ----- \$2.50 each; 25 or more, \$2.25 each

Select Tested \$3.00 each

Nearly every beekeeper who has visited our apiaries has become a customer. There must be a reason.

JOHN G. MILLER, 723 C Street, Corpus Christi, Texas



BINGHAM BEE SMOKERS

Win Smoker Contest at New York State Beekeepers July meeting

	size of stove	weight
Big Smoke with shield	4x10	2 3/4 lbs.
Big Smoke without shield	4x10	2 1/2 lbs.
Smoke Engine	4x 7	2 lbs.
Doctor	3 1/2 x 7	1 1/4 lbs.
Conqueror	3x 7	1 1/8 lbs.
Little Wonder	3x5 1/2	1 1/4 lbs.

For sale by Texas Honey Producers Association, Diamond Match Co
J. J. Wilder, Dadant & Sons, all G. B. Lewis Co. Agencies and others
A. G. Woodman Co., Grand Rapids, Mich.

QUEENS

Three Banded Italians Only

Safe Arrival Guaranteed

Prompt shipments after April 5th.

1 Untested Queen.....	\$ 1.25
6 Untested Queens.....	7.00
12 Untested Queens.....	13.00
1 Tested Queen.....	1.75
6 Tested Queen.....	9.90
12 Tested Queens	18.00

H. Grossenbacher

2217 S. Flores St. San Antonio, Texas.

PACKAGE BEES

NUCLEI OUR SPECIALTY

Three Banded Italian Queens

Our BEES and our EXPERIENCE will give you prompt and satisfactory service.

One 2-frame nuclei, no queen, \$4; 25 or more, \$3.75; 50 or more, \$3.50; 100 or more, \$3.25.

One 3-frame nuclei, no queen, \$6; 25 or more, \$5.25; 50 or more, \$5; 100 or more, \$4.75.

Queens: One untested, \$1.50; 6, \$8; 12, \$15; 50, \$60; 100, \$100. Tested queens, \$2.50 each.

Package bees same price as nuclei. Write for early order discounts from above prices and our guarantee on shipments. We will surprise you.

COTTON BELT APIARIES
Roxton, Texas

Patterson & Winters' Queens

Early Order Discounts for 1922 on Queens and Package Bees

Orders received during December 1921,	8 per cent
Orders received during January, 1922	6 per cent
Orders received during February, 1922.....	4 per cent
Orders received during March, 1922.....	2 per cent

One fourth cash with order, balance before shipment.

QUEENS

1 untested queen \$1.25; 25 or more.....	\$1.00
1 tested queen 2.50; 25 or more.....	2.25
1 select tested queen, \$3.00; 25 or more.....	2.50

NUCLEI

Two comb regular nuclei.....	\$3.60	Twenty-five or more.....	\$3.45
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PACKAGES

One 2-pound package, \$3.60; 25 or more, \$3.45
One 3-pound package, \$5.00; 25 or more, \$4.75

Add price of queen wanted when ordering above packages

REFERENCES: Adams National Bank, Devine, Texas; Atascosa State Bank, Jourdanton, Texas.

Jourdanton

PATTERSON & WINTERS

Texas

Burleson's Old Reliable Three-Banded Italian Queens

—NONE BETTER

The very best queens for the balance of the season, \$1.00 each, or \$90.00 per hundred.

T. W. BURLESON QUEEN YARDS

J. W. SEAY, Mgr.

MATHIS, TEXAS

Airco Foundation

to have, and retains the full rich aroma of natural beeswax that the bees like. THE MILLING is done on our entirely new-plan type mills and gives the exact shape of the base of natural honeycomb, perfectly symmetrical sides of the base, with the walls braced as in natural comb. It is instantly acceptable to bees. SEND for sample. We want you to judge.

THE WAX is refined by our new process, in an immense vat, without the slightest contact with any acid and so is the cleanest, strongest wax possible

The A. I. Root Co.
Medina, Ohio

W A N T E D

I have about 40 practical inventions in most all stages of development, several of which have been in the market from five to twenty-five years, thus proving the practicability of my ideas. They relate to many different industries, from novelties to "safety aeroplanes" (small flying models have proven "inherent lateral stability" and "slow landing features," which Mr. Orville Wright claims are the "greatest needs of aviation today." Desire to sell an interest or outright any or all of them, especially an interest in the honey inventions so as to get them in the market at once.

I. B. SANDERS

1307 HOUSTON ST.

FT. WORTH, TEXAS

Stock in the A. I. Root Co. of Texas

I have under control \$3,500.00 A. I. Root Company of Texas stock. This is offered to beekeepers of Texas at par which is \$100 per share. Our stockholders have gotten a liberal cash dividend for the past two years and our business is growing—based on principles of fair dealings, quality and service. If you are a beekeeper we want you with us. For full particulars address,

B. I. Solomon

Vice Pres. The A. I. Root Co. of Texas

BOX 765

SAN ANTONIO, TEXAS

Beekeepers Legal Rights

The American Honey Producers League has accepted the offer of Mr. Colin P. Campbell of Grand Rapids, Michigan, to compile and make a digest of all of the court decisions affecting the bee business and the legal questions arising from beekeeping.

This work will be published by the League in booklet form and will be sold to beekeepers who will thus have available a handy reference book in case of legal difficulty or unjust discrimination. It will cost about \$500.00 to publish this work. Will you help? Donations are requested from beekeepers everywhere and from dealers in honey or bee supplies. Make checks payable to American Honey Producers League and mail to Secretary, San Antonio, Texas.

Annual White Sweet Clover Seed

(James or Alabama Strain)

Start right. Buy your seed from the home of this new plant.

This clover was discovered growing in Alabama by our Mr. James, in 1919.

We are offering a limited supply at \$2.00 per pound, delivered. This will be clean, hulled, scarified seed. Germination test must please you. Write for further information as to how to grow, etc.

F. A. James Clover Seed Co.,
NEWBERN, ALABAMA

SANCO BEES

Three Banded Leather Colored Italians that stand the winter best of any known. Repeat Orders Mean Satisfied Customers.

Let us book your order now for a good shipping date. 1922 PRICES

2-frame Nuclei with Queen \$4.50 each.

3-frame Nuclei with Queen, \$5.50 each

Terms 25 per cent with order, balance 15 days before shipping date.

Be a "SANCO Satisfied Customer"

If once a buyer, you'll always be a customer Safe arrival guaranteed in U. S. and Canada

SANCO BEE COMPANY

J. B. Sanderson, Prop. Fredericksburg, Ohio

Package Bees

THREE BAND AND GOLDEN QUEENS

1 Untested Queen -----\$1.00

1 Tested Queen -----\$1.50

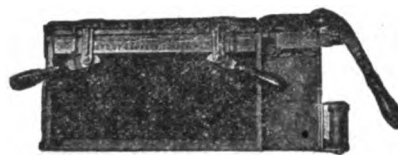
Bees, per lb. -----\$2.00

Write for Price List

NO BEE DISEASES

Indianola Apiary

VALDOSTA, GEORGIA



PAT. JULY 30, 1918

C. O. BRUNO NAILING DEVICE

Made for the Huffman Brood Frames. A combined Nailing, Wiring and Wedge Clamping Device. Has been tried and is guaranteed to do accurate work.

PRICE \$7.50

Complete directions for operating are furnished with each device.

Manufactured by C. O. BRUNO
1413 South West Street, Rockford, Illinois

Latham's Queens Suit Other People Besides Latham

"The 40 queens arrived in fine conditions. All beauties."

"Those queens you sent me beat anything I ever saw. My hives are full of bees."

"I am delighted with the queen you sent me."

"The queen I received from you has the greatest amount of brood of any queen in my yard, and I have queens from nine different breeders."

"The 25 queens received July 1 are certainly fine."

"We are delighted with the quality of stock you sent us." (100 queens went here.)

"The queen you sent me is a prize. I introduced her into one of my weakest colonies, and now she is laying in 20 combs. Nothing weak about that colony now."

"Your queens have been highly satisfactory in the past so you see I am coming again. 'She-suits-me'."

She-Suits-Me Queens Are Line-Bred Italians

Vigorous, prolific, and throwing workers that are snappy and hustling, they meet the need of the practical beekeeper. They are dependable, and their presence in your hives means profit to you.

PRICES—Untested, from May 15 to June 15, \$2.00 per queen. If 10 or more go in one order, \$1.75 per queen. After June 15 and until November from 1 to 9, \$1.50 per queen; from 10 to 24, \$1.30 per queen; from 25 to 40, \$1.25 per queen. 100 queen \$115. Tested queens, \$3.00 thruout the season.

DISCOUNT—Upon all orders received prior to April 1, 1922, a discount of 20 per cent will apply.

TERMS—10 per cent of price must accompany order to insure booking and discount, and the remainder must be remitted before queens are mailed.

Send for price list of queens, packages and nuclei. Packages for New England States a specialty

Norwichtown

ALLEN LATHAM

Connecticut

Fifty full colonies and 700 nuclei devoted exclusively to my queen business

DADANT'S

Fifty Years of Service

BEFORE THE INVENTION OF FOUNDATION

"I have been using Dadant's comb guide press which makes a very thin piece of wax to hang down from the center of the frame or section as a guide. The guide may be made as deep or as shallow as you wish. I have found it very practicable, the bees always building to it. It is very quickly and easily applied, being neater, cheaper and less in the way than wooden guides." W. A. Byrd in North American Bee Journal, October 1872.

Now After Nearly Fifty Years of Service Still in the Lead

Graycroft Farms, Madison Station, Tenn., Sept. 5, 1921.

"I should like to add that your Dadant's brood foundation is of the most excellent quality I have yet used, both in clearness of wax and excellence of manufacture of the sheets.

P. G. Barnett.

Dadant's Foundation Every inch, every pound, every ton
equal to any sample we have ever
sent out.

Specify it to your dealer. If he hasn't it write us.

DADANT & SONS **Hamilton, Illinois**

Catalog and Prices on Bee Supplies, Beeswax, Wax Working into Comb
Foundation and Comb Rendering for the Asking.

**Texas Honey Producers Association, San Antonio, Texas,
Agents for Texas---Send your orders to them.**

THE BEEKEEPERS ITEM

A SMALL ITEM IN ITSELF, A BIG ITEM FOR BEEKEEPERS.

Entered in the Postoffice at New Braunfels, Texas, as Second-Class Matter.

Louis H. Scholl, Editor.

One Dollar Per Year

VOLUME 6

NEW BRAUNFELS, TEXAS, FEBRUARY, 1922

NUMBER 2

National Cooperation Gaining Ground

Report of the Third Annual Convention of the American Honey Producers League Shows Many Important Matters Have Received Attention During the Past Year, With Still Greater Activities to Follow

E. Guy LeSturgeon

GREATER COOPERATION is very rapidly gaining ground in the beekeeping industry. It again manifested itself at the Third Annual Meeting of the American Honey Producers League held at Salt Lake City, Utah, Jan. 30-31, 1922. Although the meeting lacked in numbers of delegates, due mainly to long distance and high railway fares, enthusiasm prevailed and the committee reports showed the good work that had been done in the short tenure of life of the new organization.

The first subject of general discussion was the report of the Bureau of Standardization and Grades. Mr. F. Rauschfuss, Chairman, had gone to considerable expense and labor in collecting from various parts of the country

A committee was asked for to examine the various samples presented and to select from them a set that would most nearly harmonize the difference of various parts of the country. This committee was composed of F. W. Redfield, Thos. Chantry, A. G. Anderson, C. H. Wiley and J. Skovbo. An auxiliary or advisory committee, composed of H. H. Root, E. T. Atwater and E. G. LeSturgeon was requested to act with them. After a lengthy discussion it was decided to withhold any final action until the next meeting of the League and Mr. Rauchfuss was instructed to continue his investigation of the subject.

The Bureau of Education, Dr. J. H. Merrill, Chairman, filed a full report showing the ac-



View in Salt Lake City, Utah, Showing Hotel Utah and Mormon Temple.

full sets of grades as used in the different districts. More than thirty of these were shown and their great variation proved the need for a universally recognized standard grader. Papers bearing on this subject were presented by Arthur C. Miller and Dr. E. F. Phillips.

activities of state agricultural colleges and making recommendations for the furthering of the work. From data presented it was learned that there are only fifteen agricultural colleges in the United States in which beekeeping is not taught. Seventeen states have extension

the tomb, led by some fascination which he could not understand, the Roman soldier became a self-appointed guard of the resting place of the body of Christ. During the night preceding the resurrection, he was seated at the door of the tomb when some Roman soldiers who had been detailed to guard the tomb, approached. There was no way of escape and no-where to hide. At one side of the tomb grew a thorny bush from which he had cut the crown for the Savior. In his extreme need he crawled beneath the bare branches of the thorny tree and prayed to the Savior, asking his deliverance and saying that even as a Roman soldier that he had chosen the crown of thorns which would inflict the least injury, and promised that if he should be delivered from the Romans that he would ever serve the new cause. As he opened his eyes he found himself hidden, as the tree was covered with thick, ever-green leaves, interspersed with bright red berries. A voice said to him, "These ever-green leaves and red berries shall be a remembrance of you throughout all ages and you shall preach my gospel in far lands." The legend further says that this Roman soldier became the first missionary into the land that is now called Switzerland. It is most probable that this legend had its origin during the Middle Ages, when men tried to connect everything with the history of Christ. It could not possibly have come from Palestine as the holly does not exist there.

Of the hollies growing in America, there are several species which are very important as honey plants. *Ilex opaca*, or the American Holly, is perhaps the best known of these plants as this is the one so largely used for Christmas decorations. Its name, *opaca*, comes from the fact that the berry is very firm and hard and does not show any transmission of light as do the berries of the other members of this family. The American Holly grows from Massachusetts, west to Missouri and south to the Gulf. It is reported to occur as far west as Wharton and Kerr Counties in Texas, but in very scanty numbers. It grows to be a good sized tree and is best recognized by its ever-green leaves which bear a few large thorns along the edges, and by the dark red berry. Wherever it is found in quantities, it produces quite an amount of surplus and in some places is the chief source of the honey supply. It blooms owing

to location, from March until May. In East Texas it is looked upon as being a source of considerable honey. The honey coming from this tree is said to be almost water-white and with no pronounced flavor.

Ilex vomitoria Ait. and *Ilex Cassine* L, are smaller species, ranging in size between a bush and a small tree. These species of *Ilex*, ranging in size between a bush and a small tree. These species also have ever-green leaves and red berries. The leaves, however, are very small and bear no distinct thorns and the berries are small, bright red and semi-transparent. These two species are the common "yupon" of Texas and the South, and one of them, *I. Cassine*, is called "Texas Holly." Just what the origin of this common name is, is not known, but wherever found it is applied to some species of *Ilex*. It is variously spelled, "Yeepon," "Yepon," "Yupon," and "Youpon." These two species are the source of an enormous amount of honey throughout the swamp lands of the central South. The honey is amber or dark and has a very distinctive flavor, and does not granulate quickly. These plants bloom from the last of March to the first of May.

In the same locality with the above species will be found *Ilex decidua* Walt. This plant is also known as "yupon" or as "possum-haw." It is easily known from the other species from the fact that it drops its leaves and the bare stems with the bright red berries make it very conspicuous during the winter time. As this plant blooms at the same time with the two species mentioned above, the honey from these three plants are so blended by the bees that it is impossible to tell just what the character of the separate honeys is. This plant is more widely distributed than the two preceding, but occurs only sparingly.

Along the Atlantic and Gulf Coast from Virginia to Eastern Texas, there occur two species of *Ilex* which are closely related and are ever-green. These species, *I. glabra* L. and *I. lucida* T. and G., form immense thickets in the low or swamp lands along the coast and rivers. The first is the famous "Gall Berry" of the South, and the second is known as "swamp gall berry." These two plants bloom from May until June and are the source of much nectar. Beekeepers in Georgia and Alabama report that they never fail to get a honey flow from them.

BEEKEEPERS EXHIBITS AT FAIRS

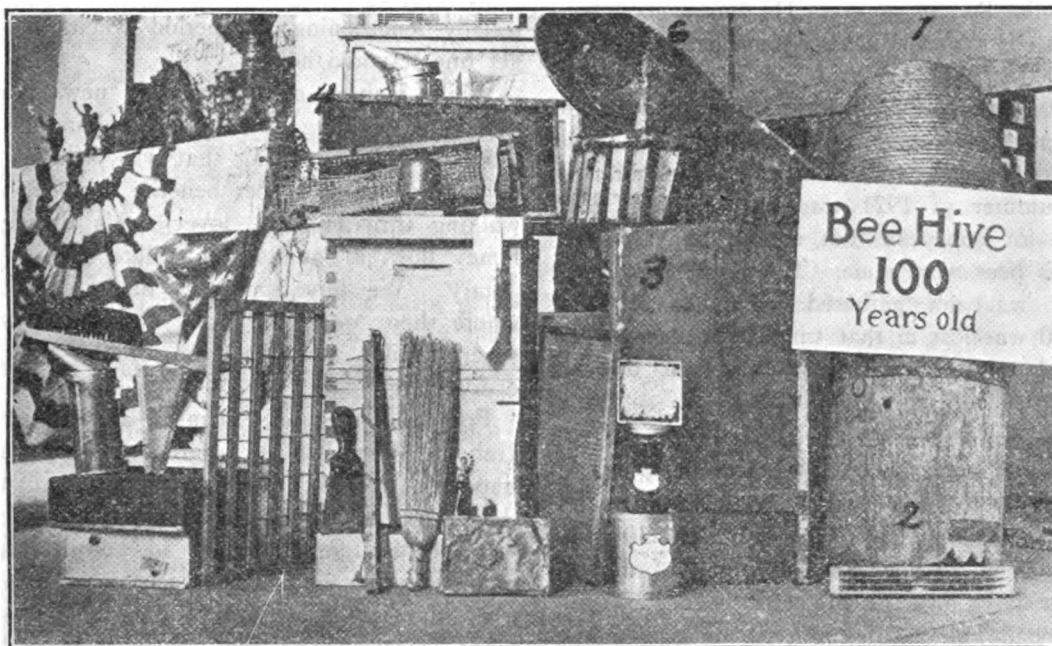
J. C. WOOD

Traveling about the country as I do in my exhibition work with various shows, I have occasion to see many displays of honey and bee supplies as shown by beekeepers and associations at the various fairs. I am always interested in bees and beekeeping and never fail to visit these displays whenever possible.

As the readers of The Beekeepers Item know, I have been putting on an act with the Wortham shows during the past season, and while we were at Atlanta during October, I saw a most interesting exhibit. I send you herewith a picture of a part of it. This fair had a more

Large as it was it is a pygmy beside the giant box hive, (No. 3) which was its neighbor. This was truly a "jumbo" hive, but I doubt if much surplus honey could ever be obtained by its use.

Beside these evidences of very ancient and primitive beekeeping it was incongruous to see Nos. 4, 5 and 7, which are specimens of the Texas made aluminum honey combs. No. 4 is one of these combs that shows to have been repeatedly used in the brood nest. No. 5 is one of the aluminum combs unstrung to show the way the crimped strips are woven back and forth to make the cells. The set of combs resting on the box hive are Texas made metal combs that have been used in an extracting



An Interesting Exhibit of Varying Styles of Hives at Atlanta, Ga.

than usually good display of honey, but what struck me most was the varied assortment of old and new types of beekeeping accessories.

I trust that you can see the numbers that I have put on the various objects in the picture. No. 1 is an old straw skep or hive that is a hundred years old and has contained many and many generations of bees. After a swarm had packed a hive such as this with honey it paid for its industry with its life, being ruthlessly "sulphured" as winter came on.

In picture No. 2 is shown a Georgia log "gum" which was as large and solid a specimen of the kind as one could well want to see.

super, and show the wax extension made by the bees. These combs are being extensively used in the southern States and are proving very successful.

The figure marked No. 6 was my own contribution to the display, being the large bee hat which I use in my own exhibition. There is no telling how many swarms of bees this old hat has held from time to time. As I often say to my audiences, I have truly "bees in my bonnet." I trust this picture will be of interest to my beekeeping friends who know me, to all of whom I wish to be remembered.

Stroudsburg, Pa.

BEEKEEPING IS TRUE CONSERVATION

H. L. McMURRY

Few people realize that during the honey season honey is present in practically all of the flowers. Have you ever driven by a clover field when it is in full bloom and got a whiff of the delightful fragrance? Did you know that this fragrance was coming from the nectar in the clover blossoms? Did you ever stop to think that if there were no bees present in that community, that nectar would be lost? It is an indisputable fact that the nectar produced in the thousands of neighborhoods where there are no bees is a total loss.

A few years ago Frank Kittinger lived near Caledonia, Racine county. He was a good beekeeper. His yards usually numbered 350 colonies. In 1920 he sold his honey crop for \$10,000. Failing health forced him to move to California. His bees were sold and about all of them were moved from that neighborhood. The summer of 1921 was an especially good season for honey in that region, but Kittinger and his bees were gone. The honey was there but it was not gathered. This means that \$10,000 was lost in that small area alone. Not only that, the people lost tons and tons of wonderful food.

Last summer I drove through a northern county. It was a burnt over section. I noticed large pink colored areas—the fireweed in full bloom. I had a friend who had bees 30 miles away which were getting no honey. I advised him to move into the fireweed section. By July 27 he had 114 colonies moved. He reports that he took from these bees 11,000 pounds of honey. If these bees had not been moved into this section that 11,000 pounds of honey would have been lost.

No one can estimate the amount of honey that is lost each year. I will venture the guess that we are not gathering more than 10 per cent of the available nectar produced in Wisconsin. If we could possibly have bees enough to gather and store all of the available nectar we would literally have "rivers of honey."

Madison, Wis.

Some of the clubbing offers in this issue should appeal to you, and it will help you to get a lot of reading matter at a low price.

MORE EXPERIENCE WITH HUBAM

ALBERT E. DAY

When Prof. Hughes discovered the annual white sweet clover in 1916 he felt that he had found something that would be a great boon to farmers, but it is doubtful if he appreciated its full value.

For beekeepers it is especially valuable. It is adapted to a wide range of soil and climatic conditions and blossoms at a time of year when the plants that produce the best honey in many sections, are not blooming. It begins blooming about the time that biennial sweet clover is in the height of bloom, and comes to full bloom when the biennial is nearly thru, continuing in many cases until frost, thus materially lengthening the period when bees can get fine flavored honey.

While Hubam clover, as this new plant is called, is yielding good honey abundantly, a crop of seed is growing that will yield a profit in addition to the other benefits derived. When walking thru Hubam clover fields during the honey flow, it sounds almost like one is in an apiary. We have been in fields of Hubam where there were not many beekeepers within several miles, but the hum of the bees was everywhere.

For the general farmer and dairyman, Hubam clover will be a great help. As a soil improver it makes a much greater growth in the year that it is seeded than any other clover or other legume, and will add more nitrogen and humus to the soil than any other plant. As a pasture crop it will supplement bluegrass and other grasses that often get short in midsummer, as Hubam clover is then coming to its best. When other hay crops fail it will produce in the same year it is seeded a large crop for cows equal in quality to any of the clovers. If sowed for either hay or soil improvement, it will produce as much or more in a year than red clover will in two years, and enable farmers rotating with corn, wheat and clover, to get a crop of all three in two years instead of three and thus shorten the rotation. We had a few plants that grew eight and one half feet in four months, and a growth of six to seven feet during the season is common. When sowed with wheat or oats, it will make a greater growth after harvest than any other legume.

Now something about raising the crop. In

the spring of 1920 we received less than a teaspoon full of seed from Iowa and dropped them by hand in rows in the garden, one or two seeds in a place, and cultivated it with a hand plow. On fifteen hundred square feet of ground we raised fifteen pounds of seed. In 1921, besides the plot that came up from seed that shattered the previous year, we raised several acres, sowed in rows wide enough apart to cultivate. At first we sowed three rows at a time with a clover seed drill and had these a little over three feet apart. Later we stopped all but two holes and sowed two rows at a time, wide enough apart to cultivate with a two horse cultivator. We used the marker from the corn planter. Two to three pounds of seed per acre was used. This spring, besides again cultivating several acres, we will sow some broadcast as seed is so much cheaper now. We will sow about ten pounds of seed per acre. Some will be sown alone on frozen ground that was prepared last fall, some on the fall sown wheat, as well as that which is to go in with the oats we will sow in the spring. Where we raised it last year enough seed dropped to make a stand the coming year.

In an editorial the publisher of a farm paper said, in writing of Hubam clover: "Its possibilities as a stock feeding and soil improving crop make it the most valuable crop that has been domesticated in several centuries;" and a leading beekeeper said: "I verily believe that this plant will do more to make this a land flowing with milk and honey than any other plant possibly in the whole world." The many published statements of growers of Hubam clover show that they also consider this new plant a great blessing to beekeeping and general agriculture.

Newtown, Ohio.

There is small wonder that Iowa is making giant strides in the development of beekeeping. We, in Texas, knew when F. B. Paddock left us to go to Ames that something would happen. January American Bee Journal gives a full account of the men and work under way at the Iowa State College where beekeeping is recognized as an important industry. That the apicultural work should grow so fast that the necessary force has been increased from one man to five in only six years, indicates that beekeeping is receiving real attention.

GREATER CARE IN PREPARING HONEY FOR MARKET

W. H. Laws

It has been truthfully said that it is one thing to produce a crop of honey and another to dispose of it advantageously.

Few beekeepers are good salesmen, and often sell their product from five to ten per cent below the market price. The buyer chuckles to himself for driving a good bargain, and forthwith uses the price to "bear" the market to other producers.

Naturally enough, buyers wish to drive good bargains. We can not blame them for that, for we all desire to buy good goods where we can get them for less.

The blame alone rests on the producer. He alone is responsible, for he not only loses money but he cripples the market.

There is also a small class of beekeepers who on account of their careless methods should not demand nor expect top prices. It is of this class I wish to speak in this article. Doubtless many of this class think they have put up a really nice article, but by reason of their ignorance in packing they have not.

Cans and honey receptacles not properly cleaned, honey smeared on the outside of cans, and over the labels, even the shipping cases dirty, and the outside appearance telling their contents; dark combs used in packing comb honey instead of only the very choicest white combs, and often too little comb put in the pails offered as comb honey, are some of the reasons why top prices should not be demanded.

Producers should put themselves in the place of the buyers or the consumers, who like to see their merchandise, especially articles of food, packed cleanly and attractively labeled, and so packed for market that it will be kept clean.

Of course, after delivering to the merchant our duty is ended, but too often I have seen a pyramid of honey in pails stacked on the floor of some stores where the sprinkler and broom gave them their daily mud bath, only a few of the pails from the shipment placed on shelves for display, the only clean looking honey in the house.

What manner of canning factories think you would put out their cans of tomatoes and other fruits with the outside of cans besmeared with the contents, and some of the same sticking to

the inside and outside of shipping of cases?

I have seen some beekeepers fill their cans with honey without removing from the original shipping cases, honey running down the outside of the cans, place the lids on, hammer them down, nail up the cases and they would say "ready for market."

We better beekeepers will not stand for such packing, neither will the public always stand for it. It is travesty on our business.

Now let us look at the other side, for I am glad to say that most of the beekeepers I know use the best of care in the preparation and production of honey, and place it on the market in the very best manner. There are two beekeeping brothers I know, whose practice it is to place only the very best and nicest articles on the market, and whose examples we should emulate.

First, their receptacles are thoroughly cleansed, when taken from the original shipping cases, altho the cans themselves may look ever so bright and new. It the case of bulk comb honey only the whitest and choicest of comb, and that well sealed, is used. The cans are first filled with the comb all that can be put in without mashing. All other combs go through the extractor. Then the extracted honey is poured over the comb until the required weight is obtained, the lids to the pails well put down, the pails thoroughly cleansed and dried, and tastefully labeled, and put in the shipping cases looking bright and new.

I know for a fact that these men get from one to two cents more per pound for their honey than the average beekeeper. They sell almost wholly to the retail merchants and as their annual output amounts to upward of 50,000 pounds, their honey is shipped over a large territory. Once they get a customer they hold his trade, and I have known them to hold their trade at high prices. All through the slump in prices during the past season that hit us hard their honey was moving to steady customers at good prices.

Since we are now producing honey in quantities so much so that every grocer in the land can offer it for sale, and the public seems glad to buy it, we should be very careful to place before them only a really good article properly produced, packed and labeled. If we use an individual label let that label stand for the best to be had in that commodity, honesty

in production, neatness and cleanliness in packing. Then the public will have confidence in our business and honey consumption will be increased.

Again, don't rush the market. People ought to be allowed to buy and eat honey fifty-two weeks in the year. However, bulk comb honey should be sold reasonably quick after packing on account of granulation, but extracted honey will keep, and can be liquified as needed for the market, and the public takes very kindly to extracted when comb honey can not be had. Beeville, Texas.

POETRY AND HONEY EXHIBITS

R. J. WILLMANN

Your readers may be interested in something new recently used in our bee and honey department at the Guadalupe County Fair, held in Seguin, Texas. With the idea of not only attracting the attention of the fair visitors, but to also impress them with the use of honey as a healthful food, Mr. R. W. Romberg, one of our beekeepers of this city, composed the following, which the committee in charge had painted on a large display sign and placed in a conspicuous place in the exhibit:

In the beautiful Guadalupe Valley,
Abounding in cotton, corn and hay,
And the choicest of other products,
You see them here in display.

We beekeepers were also busy,
And we claim to be wide awake;
We have jars of golden honey,
Delicious preserves and cake.

We have bees of different color—
Blacks, Hybrids, and Goldens too,
And also the noted leather-colored;
But they all gather nectar for you.

We ask you to be wise and eat honey.
You can buy it from us for a song!
And as said by great modern Doctors,
You'll be healthy, happy, live long.

The above attracted much attention and brought out many discussions on the uses of honey and other matters on beekeeping. Seguin, Texas.

It is never too early to subscribe for a good bee journal or to renew a subscription.

Beekeepers Here and There

Conducted by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

Now that the beekeepers of America have raised a fund with which to erect a lasting memorial to the grand old teacher who was one of the leaders in bee keeping thought for so many years it is fitting to devote my space this month to his memory.

As an author of *books* Dr. C. C. Miller was



THE LATE DR. C. C. MILLER

known by his "Fifty Years Among the Bees" and "A Thousand Answers to Beekeeping Questions," but it is not through this kind of literary endeavor that he is best known. For decades no issue of the larger national publications were complete without kindly comment and advice from his pen. His famous and inimitable "Stray Straws," and his helpful and instructive "Answers to Beekeeping Questions," were permanent and popular features that month by month endeared him more and more to the fraternity.

Dr. Miller was always an example of good cheer and kindness. His pleasant smile was infectious. Happiness and optimism radiated from his presence. No one came in contact

with him without feeling lifted up in spirit and being better fitted to face the problems of existence.

He was born at Ligonier, Pa., on June 10, 1831. The Miller family was of English colonial stock, having settled early in New Jersey. His mother was of German descent but American birth. Early in his 'teens young Miller taught school and later studied medicine at Union College, Schenectady, for two years, completing his course at Ann Arbor, Mich. Because of poverty it was necessary for him to work very hard and earn his own living and tuition fees.

Dr. Miller did not find the practice of medicine very remunerative at first and after moving to Marengo, Ills., in the early fifties he again took up school teaching to help out. He had charge of the schools there as a sort of principal or superintendent for a number of years. On July 4, 1861, while Dr. Miller was away from home on a visit to Chicago, a swarm of bees came flying over the home in Marengo and his wife captured it in a sugar barrel. This started him into being a beekeeper. The subject fascinated him and he soon began writing on apicultural subjects under the nom-de-plume of "B. Lunderer." His first articles appeared in the *Prairie Farmer* and were in the nature of good natured jokes at the expense of the "blunderer" himself.

Of himself he once said: "I take pride, pardonable, I hope, in having been one of the many editors of the *Standard Dictionary*, and in having held the record for the largest yield of section honey from as many as 72 colonies." This was characteristic of him. No matter what honors came to him in his profession or because of his wide learning, the simple triumphs of his success as a beekeeper were as sweet and important to him as any.

On Sept. 4, 1920, in his 90th year Dr. C. C. Miller passed away at his beloved home in Marengo, Ill. His good works will go on and live among us, a growing monument to the memory of one of the kindest, sweetest and most wholesome men that our industry has produced.

The Honey Crop Conditions

Conducted by

MISS A. M. HASSLBAUER

P. O. Box 1048

San Antonio, Texas

CONDITIONS IN GENERAL

The general condition of the bee industry in the United States during the month of December was below normal. There was practically no activity among the beekeepers. Their honey crop was so largely disposed of that an estimate shows that as an average only 15 per cent of the honey crop remains yet in the hands of the producer still unsold. The northern states report the bees in the cellars consuming an unusual amount of stores and their conditions restless. Throughout the central and southern portions it has been so warm that the bees have been flying freely and as a consequence the heavy stores of a month ago are becoming rapidly diminished. Dry weather in the Central-South and in California is not conducive to the best growth of the honey plants.

SOUTH PACIFIC COAST: Bees went into winter quarters in better shape than in 1920. The heavy rains of the last of the month are expected to insure and increase in the nectar flows from sage and the other mountain plants. The amount of honey held by the producers is small but is sufficient to supply the demand.

NORTH PACIFIC COAST: The bees went into winter quarters in fair condition. However, heavy snows accompanied by warm days have made conditions very unfavorable. While these conditions are adverse to the bees they are favorable to the honey plants.

INTER-MOUNTAIN STATES: Bees went into winter quarters strong. However, the prolonged warm weather caused them to use up large amounts of stores. In some places bees were unpacked and fed as a result of the prolonged warm weather. Large amounts of honey are in the hands of the producers. A reduction in freight rates on honey became effective January 15 and the producers are looking for a very decided movement of honey after that date.

PLAINS STATES: The warm weather has

caused the bees to utilize a record amount of stores. Up to date there have been numerous days on which bees have flown freely and their condition is considered nearly normal. It is reported that the weather conditions are not favorable to the honey plants. It is predicted in this section that should the winter continue open there will be large losses from starvation. This section reports that for the first time the majority of the crop has been sold on the home market or the new introduced road-side market. Many large beekeepers still have considerable honey while the small ones are completely sold out.

EAST CENTRAL STATES: The conditions of the bees seen to be perfectly normal. There are ample stores on the hives and the bees went into the cellars late enough that they will not suffer before the coming of spring. The honey situation is good. The majority of the crop has been marketed at a fair price.

NORTH-WESTERN STATES: The bees went into winter quarters with heavy stores and conditions are such that they are consuming only the normal amount of food and should come through in first-class shape. The shortage of fruit has brought about a better local demand for honey than has ever been known. The local beekeepers have sold their crop and are purchasing from outsiders to supply their customers.

WEST INDIES: The indication for the new crop is good. The bees are in good shape and heavy honey flows are expected within the coming month. The majority of the honey being sold at the present time is going to Holland.

SOUTH-WESTERN STATES: There has practically been no cold weather and the bees have flown almost every day. In sections mistletoe, elm, red cedar and willow have already bloomed and the bees have commenced to build up.

TEXAS: The past month has been warm and dry. Bees have been active and are consuming enormous amounts of stores. A few plants are blooming sufficiently to keep up some brood rearing. Light rains the middle of January have induced the blooming of huisach and huisachilla. If the weather had continued warm these and other pollen plants would have caused a very rapid building up of the bees and consequently the consumption of enormous

amounts of stores. Every beekeeper should look well to his colonies now and feed whenever a colony is found to be short on stores as a very little feed will save a valuable colony. The majority of honey has been marketed and in numerous cases large beekeepers are buying outside honey to continue their home trade.

THE TEXAS STATE QUEEN YARD

E. G. LESTOURGEON

When the beekeepers of Texas formed their marketing association five years ago it is a rather remarkable fact that their first official action had no relation to markets or finance, but took the form of an appeal to the state law-making bodies to provide for experimental work in beekeeping and the establishment of a state queen breeding station. This seems to be a



The Experiment Apiary Queen House

characteristic of the true beekeeper. He loves his industry and wants to see it extended and improved. He is always willing to share his blessings with others, and often sacrifices his own pecuniary interest to do so. This is a digression, but it is worth saying, since every subsequent public activity of this association has been colored with the same disinterested generosity.

At this time we were very fortunate to have as a member of the Texas State Legislature, Mr. Louis H. Scholl, of New Braunfels, Texas, now the editor of The Beekeepers Item. He at once prepared an experimental apiary bill providing for an appropriation annually of the sum of \$6,000.00 from the state treasury to support

and extend the work. With the new beekeepers association strongly behind him he was enabled to obtain the passage of the bill.

Several experimental apiaries were at once established in different parts of the state for the study of bee behavior and apiary conditions. More important, perhaps, than these was a queen rearing yard that was established near San Antonio, Texas, in Bexar County, for the raising of purely bred queens, to be distributed, at a nominal price, to Texas beekeepers. This has made it possible for hundreds to improve their race strains, and has been of inestimable value to the extension workers in inducing the old type bee farmers to abandon their box hives.

In the illustration presented herewith is seen the queen house with cell grafting room, which nestles in a grove of small oak trees at the edge of the mating yard. Under the care of Mr. A. H. Alex, our state queen breeding expert, this work has grown until it must now be extended. Another site has just recently been secured several miles south-east of the original yard, where the main work will be carried on in future.

San Antonio, Texas.

THE HOLLIES AS HONEY YELDERS

(Continued from Page 10)

The plant is covered with thousands of small white blooms and the flow continues for nearly a month but is not copious. The largest flow recorded from this source was said to be 150 pounds. As a common rule it seems that about 35 to 40 pounds is as much as can be expected. The enormous number of these plants which grow together make it almost impossible to overstock a location. The honey is light amber and very heavy. It is very mild in flavor and is not known to granulate. From North Carolina south and west to East Texas, "Gall Berry" is the chief source of the honey supply, and the large majority of the honey shipped from the South is either entirely or largely from this plant.

There are numbers of other species of Ilex, which are nectar-bearing and occur in various locations of the United States, but with the exception of those mentioned, the numbers of the plants are not sufficient to produce a distinct surplus.

San Antonio, Texas.

The Beekeepers' Item

A Small Item in Itself, a Big Item for Beekeepers.

LOUIS H. SCHOLLEditor and Publisher

Published Monthly.

Subscription Price\$1.00 the Year

Entered as second-class matter Dec. 13, 1916, at the Postoffice at New Braunfels, Texas, under the Act of March 3, 1879.

CHANGE OF ADDRESS: When a change of address is ordered, both the new and old must be given. The notice should be sent as promptly as possible before the change is to take effect.

DISCONTINUANCES: Notice will be given just before expiration. Subscribers are urged, if unable to make payment at once after expiration, to notify us when they can do so. Any one wishing his subscription discontinued should so advise us upon receipt of the expiration notice; otherwise it will be assumed that he wishes **THE BEEKEEPERS' ITEM** continued and will pay for it soon.

ADVERTISING RATES: These will be furnished upon application.

On account of a burn-out motor causing much delay in the printery this number is a week later than we had anticipated. Everything was ready to have the journal come out on time but for the delay in the shop. It is our purpose to mail each issue between the 10th to the 20th of the month.

For the convenience of those whose subscription has expired a renewal blank is enclosed in this number. We wish to thank all our readers for their generous support. An early renewal will also be appreciated so we can keep our mailing list up-to-date. Thank you.

Some very valuable and interesting tabulations, based on the census figures, are worked out by the January American Bee Journal. Some of these are not as flattering to Texas as we would like to have believed. For instance, in 1919 Texas stood fifteenth in number of pounds of honey per colony, with an average reported production of 21½ pounds. Compare this with Wyoming's production of 77½ lbs. and Montana with 53 lbs. There is certainly room for more bees because Texas has less than one colony per square mile while Tennessee has over four and a half. In fact, Texas is 27th in this tabulation. In honey production per square mile New York leads with over 65 pounds and Texas runs 19th with 19 pounds.

THE POWER OF COOPERATION

It is impossible to forecast what any single individual will do, but one can predict with scientific accuracy what 1000 people will do, under certain circumstances. Thus if one stood on a busy corner all day he would find that of every thousand men who passed, a fixed number were smoking. This number would vary only slightly from hour to hour.

The life insurance company can tell us the average length of a man's life in any given environment and occupation, but they cannot tell one what is most important to the individual—how long *he* will live. The individual is a law unto himself. The group is a known quantity. This, we believe, helps to explain why an organization becomes more powerful and more efficient than an individual.

The individual is subject to alternating spells of gloom and optimism. He is productive one day and tomorrow is stale and idle. He is not stable. The individual knows that if he makes a mistake it may be fatal. A member of the organization may make a mistake feeling sure that others will correct it before serious damage is done or expense incurred. This gives him courage he would not otherwise assert.

The life of an organization is not subject to the hazards that surround the individual. An organization cannot be run over by a street car nor have its arm broken by a flivver. The organization is man's way of overcoming the laws of chance, and capitalizing the law of averages.

The beekeepers in counties of the states having agricultural or farm demonstration agents, should join with them in organizing boys' and girls' bee clubs. This can but help a community in several ways, by bettering beekeeping conditions through the youth of the country, and by increasing the pollenization of blossoms that bear fruits and seeds.

The beekeeper who can plant or sow something in his locality that will supplemented the native honey sources, will insure the safety of his beekeeping just that much. Just what this may be, or whether it is at all possible, must, of course, be determined by him since climatic, soil and other conditions enter into the matter of nectar yields to such a great extent.

DR. C. C. MILLER MEMORIAL FUND

As promised our readers we have at last, an opportunity to publish a list of the contributors to the Dr. Miller Memorial Fund. Look it over carefully and note if your name appears in it and if the amount contributed by you is listed correctly. If you have not donated toward this worthy cause then do so still, or as soon as you can, as the subscription list will be continued indefinitely.

The total of the list so far is \$812.00 but more is being added constantly. It may be of interest to know that Texas beekeepers contributed more than a hundred dollars in appreciation of the great work of this worthy beekeeper.

W. A. Davis.....	\$1.00	T. W. Burlson	5.00	D. W. Switzer.....	1.00	Miss L. E. Spaulding	2.00
Francis Jager	5.00	W. G. Stephens	2.50	F. W. L. Sladen.....	1.00	J. R. Coulson.....	1.00
John Auckland	1.00	L. H. Terry	1.00	J. D. Harris	1.00	O. L. Zody	1.00
G. A. Conaway	1.00	L. R. Nolen	3.00	A. C. Burrill	2.00	F. L. Day	1.00
Mason J. Niblack.....	1.00	J. W. Barkmeyer	2.50	Enoch Babb .....	.50	C. H. J. Baumbeck	.50
Jas. A. Stone & Son	1.00	J. B. King	2.00	Frank L. Cady	1.00	C. A. Kuhn.....	1.00
Gustab Vohnke	1.00	Levi Zallegg	1.00	X. J. Kennedy	1.00	Geneva Stroete	1.00
Curtis C. Wharton25	E. G. LeSturgeon.....	10.00	Jasper Knight	2.50	C. H. Morgan	1.00
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W. B. Yates	1.00	Sophus Olsen25	A. J. Foss	1.00	A. J. Miller50
L. C. Hartman	1.00	W. S. Pangburn	1.00	Wallace Griffin25	Frank Schingle25
Chas. D. Blaker	1.00	Wm. B. Barnard.....	.50	Howard Griffin .....	.25	A. F. Rexroth.....	1.00
C. M. Elfer	1.00	Edw. W. Kriwitz .....	.10	John Kneser .....	.50	F. E. Franklin.....	1.00
Dr. F. S. Nash	1.00	F. H. Thiele.....	.25	Montgomery Co. Beekeepers Ass'n. of Pa.	25.00	Clayton C. Hoover	1.00
Lee Elliott	1.00	D. L. Ulman	1.00	J. C. Wilhite .....	.25	N. Palmer .....	.50
Teddy Riberg .....	.25	Samuel Heashman .....	.25	Jos. E. Wilson .....	.25	T. W. Livingston..	5.00
E. M. Barteau	1.00	Flora McIntyre	1.00	E. F. Phillips	15.00	Chas. L. Ruschill..	1.00
J. W. Stine	1.00	G. T. Rawls .....	.25	E. L. Sechrist	5.00	Wounded Soldiers, State College, per Edwin J. Anderson	8.00
J. E. Keys	1.00	Francis K. Caldwell	.25	F. W. Churchill	1.00	Benj. B. Jones	1.00
Reuben E. Sanders ..	1.50	R. N. Greenfield	2.00	A. N. Norton	1.00	D. C. Gilham.....	1.00
A. Jones	1.00	G. B. Woodberry.....	1.00	J. O. Stewart	2.00	Wm. Bitzer	1.00
F. Dundas Todd	1.00	Frank M. Batty.....	1.00	Il. Christensen	1.00	Harvey J. Armbrush	.25
T. J. Robinson.....	.50	Theo. Melder	1.00	A. E. Wolkow	1.00	G. H. Peterson.....	1.00
Wm. Sonntag	2.00	N. L. Jones	1.00	P. H. Hindinger	1.00	Hildier J. Monger..	1.00
John F. Johnson.....	.10	H. C. Carpenter50	N. R. White50	Chas. LaRue	1.00
John J. Hammel	2.00	Geo. Kirk	1.00	Henry H. Hanssen..	1.00	Byron Scheid50
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Arthur M. Wheeler....	1.00	A. B. Swanson.....	.25	James A. McCarty..	1.10	Tupper Bros.....	1.00
Julius Nemets20	R. B. Hunter25	Anton Gross	1.00	C. F. Parker10
Harry Fisher	1.00	Don McPherson	1.60	H. Martens .....	.50	R. A. Dehmel.....	5.00
L. W. Benson	1.00	Jno. F. Stoughton..	.50	Mrs. M. T. Allen.....	1.00	David R. Johnson..	1.00
C. H. Cobb	1.00	J. L. Hood10	Anton Matson50	A. O. Jones.....	2.00
M. S. Layton	1.00	Ambrose Peet	1.00	Irving E. Long	1.00	Mrs. Ethan E. Whit- ing	2.00
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E. M. Cole	1.00	J. A. Bishop50	F. X. Arnold	2.00	Edw. N. Marsh.....	1.50
P. B. McCabe	1.00	J. F. Michael.....	1.00	L. K. Hostetter	1.00	Chas. Frickel	1.00
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E. L. Hall	1.00	Dr. E. Kohn & Sons	.70	C. H. Ehlers	1.00	David E. Wood.....	2.00
Wm Muth Rasmussen	5.00	C. Stone50	William Kraus	2.00	Fred Canoles	1.00
C. F. Chapin .....	.50	C. A. Lincoln.....	1.00	Walter A. Kuenzli ..	2.00	W. Denison .....	.50
Franklin Wilcox.....	1.00	Paul Coggins .....	.25	Wm. E. Kieffer.....	1.00	W. R. Elwood.....	.25
Mrs. John Fogt	1.00	Lynn B. Gilmore....	.50	Wm. Bair	1.50	Miss M. I. Bland..	1.00
L. E. Webb	1.00			J. T. Starkey	1.00	Alameda Co. Beekeepers' Ass'n. by Cary W. Hartmen	35.00
				W. J. V. Johnson....	1.00	T. P. Ferhuse.....	.50
				J. W. Peterson.....	1.00	Gertrude Ferhune ..	1.00
				Knute O. Thorsvig..	1.00	Chsa. F. Combs....	1.00
				T. G. Lytle	1.00	J. R. Kennan.....	1.00
				W. H. Meyer.....	1.00	Geo. H. Nichols....	.25
				M. A. Elderkin.....	1.00	Mr. and Mrs. E. W. Foster	2.00
				W. H. Humphries ..	4.95	F. R. Helmick.....	.25
				Francis Watterstrom	1.00	Mrs. S. R. Dillman..	.25
				Moody & Moody	1.00	Henry S. Nixon....	2.00
				Wm. F. Weichel.....	.50	C. F. Rife.....	1.00
				Geo. W. York & Wife	10.00	J. H. Allison.....	1.00
				M. C. Richter.....	5.00	J. F. Moore	5.00
				D. O. Taplin.....	1.00	Edw. Sterner	1.00
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				C. E. Miller	1.00	Robt. Kuhn50
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				W. S. Carrico	2.00	Mr. and Mrs. W. H. Zent	2.00
				G. F. Schilling.....	1.00	F. T. Godfrey.....	2.00
				Mrs. H. L. Wells....	1.00		
				H. C. Davis	1.00		
				R. E. Hile	1.00		
				F. D. Covell.....	.25		

B. B. Jones -----	1.00	Edw. P. Tremper----	2.00	P. Provensal -----	1.00	C. W. Hayes -----	1.00
Dr. F. D. Nash -----	1.00	W. W. Foster-----	1.00	E. W. Cothran ----	1.30	Emmett Deere -----	1.00
J. H. Tubbs -----	.25	Lawrence Ginter ---	.50	Frank Reed -----	1.00	Mary L. Comstock--	2.00
N. W. Saunders -----	1.00	Jno. H. Kitchen-----	1.00	Otto Puhlmann ----	.16	Geo. Kay -----	2.63
Frank Marsden, Jr..	1.00	Jas. Maxwell -----	1.00	Aug. Pape -----	1.00	Wm. Phalen -----	.25
J. W. Hinton -----	1.00	Geo. J. Giersmann		Mrs. Ed. Castlemen .25		Alabama State Ass'n.	12.20
J. H. Merrill -----	2.00	and Family -----	1.00	H. B. Parks -----	6.00	Dr. G. H. Buffum--	5.00
John B. Reese-----	1.00	T. McLaine-----	1.00	A. M. Hasslbauer---	1.00	Herman Rauchfuss -	5.00
A. L. Colton -----	1.00	J. H. Zak -----	1.00	H. D. Murry -----	1.00	Wm. Lindenmeier ---	2.00
Dr. W. J. Quick-----	1.00	Clyde W. Reed-----	1.00	Wm. Zapalach -----	.25	C. E. Drexel-----	2.00
F. W. Krouse -----	8.70	W. J. Eaken-----	.20	Carrie G. Davidson--	.15	F. E. Johnson-----	1.00
T. W. Blackman ----	1.00	C. M. Alvord -----	1.00	Reginald Morris ---	1.00	J. R. Miller -----	2.00
A. F. Brown-----	1.00	J. Stuart Scofield---	1.00	E. W. Sommerfield--	1.00	Mrs. Parker -----	.75
Mr. Logan -----	.25	H. D. Tennant-----	1.00	W. E. Joor-----	.50	Newton Boggs -----	5.00
A. G. Woodman -----	5.00	Gordon Gore -----	.10	Oscar Gaultney ----	1.00	H. D. Rauchfuss ---	1.00
John H. Schlemmer.	2.00	M. C. Osborne-----	.50	R. W. Watson -----	1.00	N. L. Henthorne---	1.00
Burt Ogburn -----	.50	Philip N. Townsend	.25	R. R. Reppert-----	1.00	A. J. Kritchfield---	1.00
J. L. Howard-----	3.50	J. I. Ulrich -----	1.00	Virginia Smith ----	1.00	Isaac Walter -----	2.00
Jack Chadwick ----	.91	J. D. Hull and Bro.	1.00	S. C. Rude -----	2.50	Dr. C. P. Gillette --	1.00
E. N. Murray -----	1.00	O. I. Lewis-----	.50	Dr. M. C. Tanquary	5.00	Mrs. Mae Doubleday	.50
Aaron Rippey -----	1.00	T. J. Hughes-----	.25	Sternberg Bros. --	3.00	Miles Crawford ---	1.00
Leonel W. Newell--	.25	Miss C. E. Jordan---	1.00	T. P. Robinson ---	5.00	Fox River Valley Bk.	
E. Gressman -----	1.00	Mr. and Mrs. Alfred		Jean Hornbuckle ---	2.50	Ass'n. -----	5.00
Chas. McKinney ----	1.00	Hengsh -----	1.00	G. F. Roberts-----	1.00	Dadant Family -----	25.00
H. F. Wilson -----	2.00	W. C. Boor-----	2.00	J. C. McCubbin-----	1.00	Louis H. Scholl---	10.00
Wis. State Beekeep-		Wm. H. Miller-----	1.00	H. L. Pearson -----	.25	R. A. McKee -----	2.00
ers Ass'n. Wis. Ho-		S. E. Johns -----	.20	Ansel F. Marble---	1.00	Wald. C. Conrads---	.50
ney Prod. -----	10.00	A. G. Karche-----	1.00	Geo. Dodds -----	1.00	S. C. Gordon-----	.50
Co-op. Ass'n. -----	5.00	G. Brundage and Sons	1.00	Ezra Mayer -----	1.00	Dr. Asa Wright-----	1.00
H. G. Quirin -----	2.00	Scharff Co. -----	1.00	Clarence E. Payne--	1.00	L. B. Smith -----	.50
E. M. Barteau -----	1.00	Nina Scott -----	1.00	Wm. McPherson ---	.75	J. W. Jackson-----	.50
Edward Roost -----	1.00	Mr. and Mrs. F. D.		Jesse Nigh -----	.50		
Frank Abbott -----	1.00	Linneus -----	.50	Total -----			\$812.00
Allen King -----	1.00	Axel Holst -----	5.00				
Elsie Fischhaber ---	1.00	B. J. Thompson-----	1.00				
Herbert M. Bachman	1.00	Lorain Co. Beekeep-					
H. Delmarter -----	1.00	ers' Ass'n. E. M.					
K. D. Raker -----	1.00	Vincent -----	5.00				
G. F. Taylor -----	1.00	Cass Schoonover ---	.50				
Connecticut Beekeep-		C. W. Rumsey -----	.79				
ers sent in by L.		W. H. Lewis-----	1.00				
B. Crandall -----	50.00	J. N. Beckley-----	1.00				
Geo. D. Shafer -----	2.00	Jas. W. Wilsey-----	1.00				
E. J. Delamarter---	1.00	E. J. Ladd -----	3.00				
M. D. Van Hulen---	1.00	C. Payne -----	.50				
R. B. Grout -----	1.00	J. F. Martin -----	1.00				
C. F. Davie -----	4.48	W. M. Forster-----	1.00				
A. O. Comire -----	1.78	Lide Martin -----	1.00				
L. C. Root -----	5.00	Bernard Kunz -----	1.00				
H. M. Dorsheimer---	1.00	A. McCulley -----	1.00				
D. Barone -----	5.00	C. Havelope -----	1.00				
Geo. A. Phillips---	1.00	J. R. Spence -----	1.00				
H. H. Moe -----	1.00	Geo. Henderson ---	1.00				
Paul D. Roban -----	1.00	M. H. Courtney ---	1.00				
W. L. Gray -----	1.00	C. Hanslope -----	2.18				
Eastern Mass. Society		M. B. Hinton -----	1.00				
of Beekeepers -----	36.00	G. W. Troxell-----	.50				
J. Bass Keith -----	1.00	F. B. Loomis-----	2.00				
Fred Bratton -----	1.00	F. C. Wiggins -----	1.00				
M. E. Hamilton-----	.45	Elmer Bengel -----	1.00				
J. W. Acree -----	1.00	Name unknown -----	5.00				
W. C. Greenleaf---	.50	Geo. W. Bader -----	.50				
J. M. Graves -----	2.00	J. H. Beatty -----	.50				
Etienne Giraud ----	2.00	Chris. Allen -----	.85				
R. L. Veil -----	1.00	Muriel W. Beers ---	1.00				
Chas. F. Baile -----	2.00	Fred F. Teets ----	.10				
Will H. Gray -----	6.00	E. Welton -----	1.00				
J. E. Pleasants ---	2.00	J. V. Bablock -----	.50				
Martin Wachter -----	2.00	Burr Leslie -----	1.50				
V. C. Davis -----	1.00	S. F. Ranney -----	1.00				
Lee Addams -----	.25	Theo. Hackbarth ---	.50				
William Turner -----	.25	H. C. Coventry-----	1.00				
Ray Pflneger -----	.50	Jos. Lindt -----	1.07				
R. E. King -----	.25	J. M. Crudgington--	.50				
Mrs. J. W. Swezey---	1.00	Clyde Nawhinney ---	1.00				
Frank Talbot -----	1.00	Harry McComb -----	1.00				
E. B. Ault -----	1.00	R. J. Radike -----	1.00				
S. A. Griffeth-----	1.00	J. R. Bullock -----	3.00				
T. F. Coffman -----	.50	B. Haworth -----	1.00				

The editor certainly regrets that he can not attend the American Honey Producers League meeting at Salt Lake City, Utah, Jan. 30-31, as other important business just at that time prevents his attendance.

If a few individual colonies in an apiary produce extraordinary large yields of surplus honey while many others produce only a mere average or no crop, is it not possible to so treat the rest that the output may be materially increased from all of them? Yes, that is true, but there are many ways of doing this. It is one of the most important subjects of successful beekeeping, that of getting more out of your colonies than keeping larger numbers. Let's give this more attention, and let us hear from the readers of this journal how they do it, or how it should be done. Let's make it a campaign for the coming year so that beekeeping may be more profitable. More intensive beekeeping is what we need. The columns of this journal are open for articles on handling colonies to get more out of them.

Five years subscription to this journal for four dollars is the price that a number have taken advantage of. Several of our subscribers are now paid as far as six and seven years ahead.

Gossip With Our Neighbors

Discussed by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

In January American Bee Journal, Dr. J. H. Merrill gives a comprehensive sketch of the honey plants of Kansas. The principal nectar producers seem to be melilotus and alsike clovers. Among the principal native plants are Spanish needle, golden rod, and hearts-ease. A great area of the Sunflower State is planted in alfalfa, and from the report of 26 observers in the state 10 reported this plant to be the most important honey plant and 4 placed it second. From eleven counties it was reported that alfalfa does not yield at all and one reported it an occasional yielder.

The Editor of Gleanings calls attention, in the January number, to an apparent falling off in interest among beekeepers generally in the subject of honey production. He bases his observations on the small attendance at meetings held in different parts of the country. He says: "The Editor is convinced that now is the time to push ahead in honey production instead of hanging back." This is sound advice. There is now a period of sharp re-adjustment which is naturally following the few abnormal years we have recently experienced. Now is the time to take a more than ordinary interest in our meetings and in the problems that confront us.

Prof. Geo. A. Coleman has completed, in the January Western Honey Bee, his series of articles on honey flora and beekeeping in our national forests. These have been very valuable additions to our knowledge of the botany and plant associations of these regions. Editor Knabenshue more than half promises that a new series from the same pen may be expected. We certainly hope so.

R. B. Manley comes to the rescue of British beekeeping but condemns the English type of hives. In the January American Bee Journal he says: "The British beekeepers' principal dif-

iculty is that he is working with what is virtually a toy frame. If a larger frame was used here less would be heard of feeding. Nine men out of ten find that when they have removed their supers at the end of the season there is practically no honey in the hive for winter." Thus everywhere the tendency is to turn to larger frames and larger hives. Quinby and Chas. Dadant are coming more and more into recognition as having been correct.

The Western Gardener and Poultryman, published at Winnipeg, Canada, has been adopted as the official organ of the Manitoba Beekeepers Association and will establish a section of the magazine devoted to beekeeping subjects, especially dealing with western conditions. In the December number the subject of large scale honey production is ably treated. Beekeeping is growing in western Canada and the statement is made that "In Manitoba, alone, there are hundreds of new beekeepers."

The editor sounds a sane warning on page 13 of the American Bee Journal concerning the danger of using flimsy cases for the shipping of 60 pound cans of honey. He says truly, "Although the beekeeper may save a little on the first cost of the case, the use of insufficient protection results in losses in transit and increased freight rates which more than offset the small savings." We have heard that one large Texas dealer expects to handle these cans in veneer cases for 1922. We hope this is a mistake. The tendency ought to be to get a stronger and better case instead of a weaker one.

In the January Western Honey Bee Phil. J. Strubel has an excellent article reviewing the first year of effort on the part of the American Honey Producers League. Mr. Strubel truly says: "The league idea is no new one; but today is the age of co-operation; now is the time to make a success of the plan. The expense of membership is far less than any other association of similar nature. It has already demonstrated that, with the small support given it in 1921, it can create a demand for honey."

Montana has undertaken bee inspection, and O. A. Sippel, formerly of Guelph, Ont., has been selected in charge of the work in beekeeping.

Texas Honey Producers Ass'n

Notes by

E. G. LESTOURGEON, Manager

P. O. Box 1048 San Antonio, Texas

Little Demand for Honey

There is a slump in the demand for honey. During October and November the demand increased wonderfully but for the past six weeks there is a condition of complete stagnation. Members who have honey in the Association warehouse should not become impatient at slow returns. Very little honey is moving at all now. We do not look for the demand to pick up until after Feb. 1st. The Association is not buying any honey for cash now. What honey is being sold is bringing 8½ cents for the light amber grades. The darker honey is not selling at any price.

The New Catalog

When this reaches you you ought to have received our new 1922 catalog. If not please drop a card to the office, as we want you to be sure and receive a copy. Prices are very much lower than last year and many new items are listed. When you want a large list of goods at one time it is better to send in a list for an estimate as one can save considerably on account of the quantity discounts. Members are to remember their special 5 per cent discount.

Beeswax and Foundation

Beewax shows no sign of strengthening in price. We are paying 20c per pound F. O. B. San Antonio, Texas, in cash, or 25c in trade for bee supplies. Write for price list of working beeswax into foundation or send us your wax for having it made into foundation. We can serve you no matter which brand of foundation you use. We have just completed an arrangement which makes this possible.

The Size of Hives

Many teachers and leaders in beekeeping are continuing to emphasize the need of larger brood chambers. There is a distinct drift in this direction. It is the central thought in such systems as the modified Dadant hive re-

presents, and is one of the advantages claimed by the advocates of the Scholl divisible brood chamber hive. This spring, while planning to make increase is a good time to try this system in your locality. We will be glad to mail any one interested a free booklet on the subject.

Selling Prices for Honey

The local (San Antonio, Texas) price on honey to consumers in pail lots is 15c per pound, or 75c for a 5 pound can and \$1.50 for a 10 pound can.

The Association price to the retail store, with freight, prepaid, and including the jobbing discount is:

Sizes	Per Pound	Per Case
2-60's Lone Star Extracted Honey -----	13c	\$15.60
1-60's Lone Star Extracted Honey -----	14c	8.40
6-10's Lone Star Extracted Honey -----	15c	9.00
12-5's Lone Star Extracted Honey -----	16c	9.60
20-3's Lone Star Extracted Honey -----	16½	9.90

This is the price charged to the retailer in Oklahoma or West Texas. Do not sell to the retailer and to the jobber at the same price. Do not undersell your dealer. It does no one any good and hurts you in the long run. A great deal of our troubles come from this bad practice.

Literature on Beekeeping

Reading beekeepers are good beekeepers. We are often struck with the fact that our members of our and other associations generally, are those who take papers and read books. Progress in apiculture, as in every other line, follows reading and thinking. These long spring days the whole family will enjoy good books. Look over the list and, if you have not already bought them, send in an order for Southern Beekeeping by Kenneth Hawkins; Practical Queen Rearing or Our Back door Neighbors, by Frank C. Pellett; Out Apiaries by M. G. Dadant or some other good book.

Spring Care of Bees

Be very careful of your bees during the next six weeks. It is the critical time. Be sure they have plenty of stores. We lose many more bees in Texas every year from spring losses than we do from winter losses. We may expect

brood rearing to begin by Feb. 15th. The bees will use up their stores for this purpose and then a week or ten days of bad weather, or a long wet spell, will cause starvation. Do not be afraid to feed. A few hundred pounds of sugar will pay as an investment. Let us cut down our terrible average of loss of bees in the spring. The Association can save you money by buying your sugar for you at wholesale prices.

How to make two blades of grass grow where only one grew before, has been the subject of much preaching in better farming educational campaigns for many years. This has been followed up with much agitation on better marketing and better prices. In beekeeping, raising two supers of honey instead of one, by better care and attention, backed by the co-operative spirit in advertising and marketing that now prevails, it may be said that this industry is keeping right up to the front.

When will the discrimination against the fine quality Southern honey in the market quotations cease? Why should honey from other sections be quoted as extracted and comb and then quote the honey from the South as "Southern strained" at the ridiculous low price of the inferior imported honey from foreign countries? There is room for proper education.

Let's do things in a better and more business-like way. There are entirely too many beekeepers who ignore the real business principles that would mean for our industry much greater distinction as a dependable business venture. While it is true that there are many actual business beekeepers there is that great majority that are not; and these are responsible for the lack of a greater advance toward putting the beekeeping industry on a more sound and safer business basis. The adoption of better business methods from the beginning of keeping the bees and producing the crop to that of marketing the output, needs to be started right at the home by the individual beekeeper and then extended out and through greater co-operation over the entire country. There is as yet too much haphazardness about beekeeping that must be overcome.

The Beekeepers Item, \$1.00 a year.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF MARKETS AND CROP ESTIMATES
SEMI-MONTHLY REPORT
JAN. 4, 1922

Shipping Point Information from Areas
(Last half of December)

CALIFORNIA POINTS:—Bees are reported to have gone into winter quarters in better shape than in 1920. Heavy rains the last of the month are expected to greatly increase the nectar flow of sage and other mountain plants. Supplies light, but uncertain as some beekeepers are still holding their crop. The demand has been only fair but the small quantity available is holding the market steady. More honey disposed of locally this year than ever before. Large shippers quote to outside buyers, in carlots and less, F. O. B. shipping points per lb.: White orange blossom nominally 11½-12½c, mostly 12-12½c; White sage 10½-12c. Light amber sage mostly 8½c, Light amber alfalfa 6½-7c; Amber alfalfa, few sales 6c. Very little demand is reported for Hawaiian honey which is nominally quoted in carload lots F. O. B. San Francisco per lb.: White 6½-7c, light amber 4½-5c, dark amber 4½-5c, dark amber 4-4½, honeydew honey 3½-4c. Beeswax is in light demand with dealers offering crude wax at 22-24c per lb.

INTERMOUNTAIN REGION:—Conditions decidedly spotted. Bees generally entering winter quarters in good strength but late warm weather used up stores very rapidly. Supplies cleaning up in some sections; in others a large amount of honey still on hand. Honey moving slowly in a local way and a slight shipment is reported in carlots. The interest of many eastern firms making inquiry has been checked by the high freight rates, but a reduction in the rate of about 1½ cents per lb. to the east becomes effective from this section on Jan. 15th and should strengthen the market. Carlot sales and quotations of white sweet clover and alfalfa reported from Idaho, Colorado, Utah and Nevada at 7-9c, mostly 8 1/4-9c, few 10c per lb. White comb ranges \$4.25-\$5 per 20 section cases for No. 1 grade, and \$4 for No. 2. Several cars of amber alfalfa still remaining in Salt River Valley Arizona for which prices of 5½ 5 3/4c per lb. are offered. Beekeepers have been receiving 24c cash or 30c in trade for beeswax.

PACIFIC NORTHWEST:—Bees went into winter quarters in fairly good condition. The wholesale price of extracted honey ranged 8-12 cents per lb.

TEXAS POINTS:—Colonies well supplied with stores and strong in bees; entered winter quarters in better than normal conditions. Recent rains in many sections of the state, tend to improve conditions of spring. Supplies limited. White honey has sold in large lots at 10-12c, light amber 8½-10c per lb., and bulk comb at 12½ 14c per lb.

EAST AND NORTH CENTRAL STATES:—Bees in favored sections made use of a few hours of flight weather during past two weeks to clean out the hives; some cellar wintered bees reported very restless. Bees seem to be wintering well thus far and no signs of dysentery have developed. Stores generally ample but colonies in Southern Wisconsin and Northern Illinois consumed a record amount of stores the past fall and beekeepers in that area likely to lose heavily from starvation. The normal holiday dullness has been experienced during past two weeks. Large bottlers said to be buying only from hand to mouth to fill current needs; therefore beekeepers have developed local and nearby demand. Many tons have been sold at roadside stores throughout the white clover territory. Some large beekeepers still have heavy holdings, but many smaller beekeepers are already sold out. White clover honey has been selling in large lots at 10-15c per lb., darker honeys at 6-10c. Demand for off-grade stock reported light. White comb ranges \$4.50-\$5.25 per case.

NEW YORK STATE:—Bees generally went into winter quarters strong in numbers and with plenty of

stores. White clover honey said to be largely cleaned up but large quantities of buckwheat are still held by beekeepers. Shortage of fruit in this state is one factor in the improved local demand which is slightly above normal. Large lots of extracted white clover have sold at 10-12 1/4c per lb. and of buckwheat at 8 1/2-9c with off-grades low as 5-6c per lb. Comb honey supplies are not heavy. No. 1 white clover has been moving at \$4.50-\$5.00 per 24 section case and No. 1 buckwheat at \$4.00.

CUBA:—Shipments to Holland continue in heavy volume at 60c per gallon including cost and freight.

SOUTHEASTERN STATES:—So little cold weather experienced in Southern Georgia and Florida, that bees have been flying practically every day and appear to be in good condition. Maple bloom is expected early in January when pollen will be plentiful and bees will begin breeding up for spring. Crop outlook normal. Some amber honey selling at 7-8 1/2c per lb. in barrels or 8 1/2-10c per lb. in cans; Fancy white quoted 9 1/2c in bbls., 12c in cans. Off-grades in bbls. reported low as 4 1/2c per lb.

TELEGRAPHIC REPORTS FROM IMPORTANT MARKETS

Arrivals include receipts during preceding two weeks. Prices represent sales or current quotations as secured from the original receivers, but must not be understood as attempting to forecast future market conditions or prices in any degree. Market condition comments represent the opinion of the trade and their accuracy is not guaranteed by the Bureau of Markets and Crop Estimates Market reports are for December 31st.

BOSTON:—Approximately 100 cases unknown comb arrived since last report. Conditions show little change with very light demand and movement. West Indian honey weak but comb and higher grades of extracted honey firm.

COMB: Sales to retailer—N. Y. 24-sect. cases No. 1 white clover \$6-7. Vermont 20-sect. cases carton stock No. 1 white clover \$6.50-7.00.

EXTRACTED: Sales to confectioners and bottlers—Porto Rico amber 75-80c per gal. Cuban amber 65c per gal. Calif. white sage 16-18c per lb. Brokers nominal less than carlot quotations delivered Boston basis per lb.: white sage 12-13c, light amber alfalfa or sage 9-10c, amber alfalfa or sage 7-7 1/2c.

CHICAGO: Colo. 1, Ida 1, Wyo. 1, Calif. 1, Iowa, 1, Cuba and Porto Rico 1 combined, Calif. 600 lbs. and Wis. 3200 lbs. Demand and movement slow especially on comb, steady on extracted. Sales to bottlers, candy manufacturers, bakers.

EXTRACTED: Colo. and Ida. alfalfa clover white 11-11 1/2c, light amber 9 1/2-10c, mixed flavors, dark 9c, Calif. sage alfalfa white 11c. Mich. and Wis. white clover basswood white 12-12 1/2c. Sales to retailers:

COMB: Iowa and Mich. clover No. 1 \$5-5.50; No. 2 \$4-4.50.

BBESWAX: Receipts moderate. Demand and movement moderate, market steady. Sales to harness makers, ship supply houses, wholesale druggists; Mo. and La. and Okla. light 30-32c, dark 27-29c.

CINCINNATI: No arrivals during past two weeks. On account of the refusal of the principal honey and beeswax receivers to furnish the information necessary to report market conditions and prices in Cincinnati accurately and completely, no report can be published for this important honey and beeswax center.

MINNEAPOLIS: No carlot arrivals and no cars on track.

COMB: Supplies liberal. Demand and movement light, market weaker, Sales direct to retailer: Colo., Idaho and Utah 24-sect. cases No. 1 alfalfa sweet clover mixed \$6-6.50. Minn. and Wis. 24 sect. cases No. 1 \$6.50.

EXTRACTED: Demand and movement slow, market weaker, Sales direct to retailers, Confectioners and Bakers: 5-gal. cans Colo. and Utah alfalfa sweet clover mixed white 12-14c per lb.

NEW YORK: Domestic and foreign receipts moderate. Supplies moderate. Demand light, market dull.

EXTRACTED: Spot sales to jobbers, wholesalers, confectioners, bakers and bottlers: Domestic per lb. Calif. light amber alfalfa 7 1/2-8 1/2c few 9c, light amber sage 9-10c, white sage 11-12c, white orange blossom mostly 13c. N. Y. white clover 9-10c, buckwheat 7-8c West Indian and South American refined per gallon 65-70c.

BEESWAX: Foreign receipts moderate. Supplies moderate. Demand moderate, market slightly stronger. Spot sales to wholesalers, manufacturers and drug trade: Per lb. So. American and West Indian, crude light 22-23c few 24c; African dark, mostly 15c few 16c.

PHILADELPHIA: EXTRACTED: Receipts are very light but supplies are sufficient to meet the demand which continues very light. Market dull, no sales reported.

BEESWAX: Supplies moderate. Demand slightly improved with a better outlook, Market firm on better grades: Sales to manufacturers per lb. crude Chilean medium 22-23c, African dark 13 1/2-14c.

ST. LOUIS: Practically no receipts of comb or extracted during past two weeks. Demand and movement slow, market steady. No jobbing sales reported. All sales made direct to retailers in small lots.

EXTRACTED: Per lb. in 5-gal. cans Southern light amber, various mixed flavors 9-10c. Calif. light amber alfalfa 10-12c.

COMB: In 24-sect. cases Colo. white alfalfa and clover No. 1 heavy \$6.25-6.75.

BEESWAX: Very light receipts. Practically no demand or movement. Market weak and prices unchanged. Nominally on sales to jobbers basis 23c per lb. for nearby and southern average country run wax.

KANSAS CITY: No carlot arrivals since last report. Supplies moderate. Demand and movement slow, market dull.

EXTRACTED: Colo. white alfalfa 10-11c.

COMB: Colo. 24-sect. cases No. 1 white \$6.50.

H. C. TAYLOR Chief of Bureau.

HOW IS THIS FOR A CROP?

M. W. MILLARD

From 50 colonies of Italian bees, with queens reared from my best stock the season before, packed in forest leaves last winter, in one story, ten frame hives, I extracted far over 5,000 pounds of as fine flavored, fine colored white clover honey, as God's nectar gatherers ever sipped from the hearts of flowers. This is the testimony of many witnesses here in Williamson County and Nashville, Tenn., where this honey was all sold and enjoyed. This shows, I think, the value of young queens, that build up quickly in spring; and of such packing that keeps the bees quiescent and brings them out with abundant stores, unconsumed, to meet the demands of early brood rearing. This honey sold like hot cakes at 21 cents wholesale and 25 cents retail in 5 and 10 pound pails.

Nashville, Tenn.

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CLASSIFIED WANT ADVERTISEMENTS

Rates in these columns are 15 cents a line. Minimum charge will be 50 cents. When sending advertisements for this department it must be so stated or we will not be responsible for errors.

BEES AND QUEENS

BEES BY THE POUND, ALSO QUEENS—Booking orders now. Free circular gives prices, etc. See large ad. elsewhere. Nueces County Apiaries, E. B. Ault, Proprietor, Calallen, Texas.

FOR SALE—1400 colonies of bees and equipment, 10 locations extending from El Paso, Texas, 25 miles north in New Mexico. If interested ask for further information. Mesilla Valley Honey Co., Canutillo, Texas.

PHELPS' GOLDEN ITALIAN QUEENS combine the qualities you want. They are **GREAT HONEY-GATHERERS, BEAUTIFUL, and GENTLE.** Virgins, \$1.00; mated \$2.00; 6 for \$10.00, or \$18.00 per dozen; tested, \$5.00. Breeders, \$10 to \$20. Safe arrival guaranteed only in the U. S. and Canada. C. W. Phelps & Son, Binghamton, N. Y.

LEATHER-COLORED queens and package bees. If you want a hive full of bees that gets the honey and stays clean of European Foul Brood, try some of our queens. Booking orders now for 1922 delivery. Blossom-Kissed Honey-Bee Company, El Monte, California.

SELECT QUEENS ONLY—Choice three-band Italians, tested, \$2.50; untested, \$1.25. Also, few Carniolans. George W. Coltrin and Son, Mathis, Texas.

GOLDEN BEAUTIES and the Famous 3-band Italian queens. Tested, \$1.25, untested, \$1.00. No discount on large orders. Safe delivery and healthy stock guaranteed. C. B. Bankston, Buffalo, Texas.

QUEENS, PACKAGE BEES AND NUCLEI—Booking orders for 1922 delivery begin shipping March 15th. We breed the very best. 1 untested queen \$1.50; 1 select untested \$1.70; 1 tested \$2.50; 1 select tested \$3.00. 2 pound package bees parcel post prepaid \$4.80. By express f.o.b. Sandia, Texas, One 2 pound \$3.75, 25 or more \$2.60. 2 comb regular nuclei, \$3.75. Add price of queen wanted with package bees less 25 cents a queen. Circulars free of our pedigreed strain of queens and bees sent on request. Dr. White Bee Co., Sandia, Texas.

WHEN it's GOLDEN, its PHELPS C. W. Phelps & Son, Binghamton, N. Y.

SAVE QUEENS—Push in Comb Queen Introducing Cage, 25c postpaid. Try it. Safest way known. O. G. Rexford, Winsted, Conn.

BEES AND QUEENS

WE WILL NOW commence booking your early spring orders for package bees and Italian queens, bred especially for the production of honey. Prices will be in accord with the reduction in material and labor. Safe arrival guaranteed. Write for prices and terms. **SARASOTA BEE CO.,** Sarasota, Florida.

CHOICE QUEENS—The kind that are better. Select tested, \$2.50; select untested, \$1.25. Carniolans same price. Geo. W. Coltrin and Son, Mathis, Texas.

BEES WANTED—Have sixty-acre farm Henderson County to trade good bee location, also fruit. Terms on balance. E. B. Ault, Calallen, Texas.

BEES FOR SALE—50 colonies bees in 10 frame, one and a half stories hive. In tip-top condition to go through winter. \$10.00 per colony. Write, Pat Burkett, Floresville, Texas.

GOLDEN QUEENS; GOLDEN—1922 price: untested, one, \$1.25; doz. \$12. Select untested, one, \$1.50; dozen \$15; tested, one, \$2.50; dozen \$27.50. Pure mating and safe arrival guaranteed in United States and Canada. Booking orders now. Tillery Bros., Georgiana Alabama.

FOR SALE—At pre-war prices very best Italian Queens and bees. Give us a trial. 700 colonies to fill your orders with. Rosedale Apiaries, J. B. Marshall and H. P. Le Blanc, Props., Big Bend, Louisiana.

QUEENS—From my old reliable leather back Italian queen noted for her long tongue and short stinger. Will begin shipping April 15th. 1 untested, \$1.25; 1 select untested, \$2.50; 1 select tested, \$3.00. Above 12 price on application. O. O. Wilder & Son, R. 2, Corpus Christi, Texas.

THREE BAND ITALIANS ONLY—Output over 8,000 queens a year. Selected Untested, one \$1.50; 6, \$7.50; 12, \$13.50; 50, \$55; 100, \$100. Safe arrival I guarantee; booking orders now. H. G. Dunn, The Willows, San Jose, Calif.

PHELPS' GOLDEN QUEENS will please you. Mated, \$2.00; 6, \$10.00; or \$18.00 a dozen. C. W. Phelps & Son, Binghamton, N. Y.

ARIZONA QUEENS—Immediate delivery \$1.00 to \$3.00, exceptional strain. Pound bees. Arizona Apiary, Clifton, Arizona.

BEES AND QUEENS

WE ARE NOW offering our Bright Italian Queens at \$1.00 each or 10% less in dozen lots. Pure Mating. Safe arrival and Reasonable Satisfaction guaranteed in U. S. and Canada. Write us for Prices on Package Bees. We have them. Graydon Bros., Bt. 4, Greenville, Alabama.

THREE BAND, packages, bees queens and nuclei. April and May delivery. Special orders solicited. Write for prices and terms. Safe arrival and satisfaction guaranteed. Tupelo Honey Co., Columbia, Ala.

NEW 1922 PRICES—On account of the present price of honey and recent reductions in the price of supplies we are now booking orders for our three band leather-colored italians at the following low prices: 2-lb. packages of bees, no queen, \$4.00; Untested queen, \$1.25; 12, \$13.50. Select untested, \$1.50; 12, \$15.00; tested, \$2.25; 12, \$20.00 No disease. Safe arrival in U. S. and Canada and satisfaction guaranteed. Write for circular and prices on quantities. J. M. Cutts & Son, R. F. D. No. 1, Montgomery, Ala.

FOR SALE—200 colonies Italian bees in two-story 10-frame dovetailed hives. No disease. Heavy, modern and in A-1 condition. H. A. Jett, Rt. 1, Box 155, Tucson, Ariz.

WARNER'S QUALITY QUEENS—1, \$2.00; 6, \$10.80; 12, \$19.20. Write for illustrated catalog. Elton Warner Apiaries, R. F. D. No. 1, Asheville, N. C.

GOLDEN ITALIANS—2 lb. packages and untested queens. Delivery guaranteed. Money returned at once if not able to fill order. Untested queens. \$1.50; tested \$2.50. J. E. Sutton, Linden, Alabama.

AUTOMOBILE REPAIRS

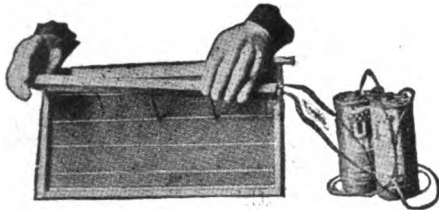
AUTOMOBILE OWNERS should subscribe for the **AUTOMOBILE DEALER & REPAIRER**; 150-page illustrated monthly devoted exclusively to the care and repair of the car. The most practical magazine for beekeepers who own automobiles or gasoline engines. The "Trouble Department" contains five pages of numbered questions each month from car owners and repairmen which are answered by experts on gasoline engine repairs. \$1.50 per year; 15 cents per copy. Postals not answered. Charles D. Sherman, 106 Highland Court, Hartford, Conn.

SHARES OF STOCK FOR SALE

On account of a change in business party offers a limited number in one of the strongest cooperative honey producers associations in the country, in blocks of five \$10 shares, bearing interest at 8 per cent and entitling full membership and all other privileges in the organization. Those wishing to purchase write for particulars to

The Beekeeper's Item

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For sale by all bee supply dealers.

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Manufacturers,
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"Superior" Foundation

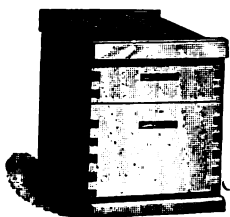
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Any of these will save you money and furnish excellent reading:

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The Beekeepers Item

New Braunfels, Texas

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF MARKETS AND CROPS
ESTIMATES SEMI-MONTHLY REPORT

(Continued from Page 152)

cared for. This is not particularly unfavorable in most of that territory where the main flow comes late in the summer, but in southern Calif. where the main flow comes early it is likely to curtail the harvest considerably. In the south, conditions are unusually spotted. Most of this territory except the east gulf states was favored with a good early springs flow, but West Texas has had very poor condition. The winter was mild, but this is not particularly favorable in the south, as it allows too much winter activity leading to heavy consumption of stores. In Southern California the dry fall resulted in short stores and the cold long winter and cold late spring has left bees very weak. Extensive feeding has been necessary to save them. Conditions are reported by some as the worst in 20 years. On general, the swarms are too weak to take good advantage of the main flow which will soon be at hand.

The Condition of Colonies on May 1

The present condition of 92.9 percent of normal is slightly below the average of recent years and about 4 percent lower than last year. The poorest conditions are in the far west. Few states east of the Mississippi River show a conditions below 90 percent and several including Ohio, Indiana, Michigan and Kentucky show normal or above. West of the River, only few much over 90 percent and Montana, Idaho and the Pacific Coast states are around 80 percent.

Condition of Nectar-bearing plants May 1

Because of the delayed season, bloom is late in north and west large areas in the higher latitudes being still under a blanket of snow. The April freeze destroyed much bloom, particularly of fruit and nectar-bearing trees from New York as far south as North Carolina and from coast to west of the Alleghenies. This damage has been largely offset by the profuse tree bloom in that territory this year. Maples and nectar-bearing trees generally were badly broken down over extensive areas, in Michigan, Wisconsin and a few sections in other states, by the crushing burden of tons of ice frozen up on the foliage during the sleet storms of the past winter. Fruit trees are blooming very heavily in the central part of States where fruit failed last year because of the early freeze. Dandelion has an unusual bloom in the north central states. While clover and the clover bloom generally are fine or promising throughout their range although winter killed to some extent in the states of the upper Mississippi Valley, the cool spring and ample moisture favor its growth. Sweet clover is reported good or fine in the central states and in Utah, but not so good in Montana and Wyoming. In Colorado large areas were drowned out by the flood. The bloom of the black locust is extraordinary where not frozen. Tulip poplar also is good though damaged some by the freeze. Sourwood suffered too. In the gulf region, the white tupelo flower flow was unfavorably effected by inopportune rains. The desert plants of the southwest, have a very irregular bloom and appear hardly up to average, due to previous drouth and a late freeze. Horsemint in South Texas appears below average, but in better in central Texas. In parts of Colorado and much of the west, winter still lingers and it is too early to judge future conditions. The abundance of moisture argues well for vigorous plant growth and bloom. In Idaho, apricots are just beginning to bloom a month late. In Southern California, the orange groves were damaged by the January freeze. Some old groves were killed outright. With the late cold spring following, it is thought that the orange bloom will be lighter and of shorter duration than usual. Heavy rain this spring have been helpful to flora generally. White sage is reported somewhat hurt by the freeze, but the black sage is only lightly frosted. Alfalfa is promising in the higher dis-

tricts of the northern and eastern portions of California, but much of the stand in the Imperial Valley has been plowed up to make room for vegetables.

(NOTE:—Next production report will appear about middle of July.)

H. C. TAYLOR,
Chief of Bureau

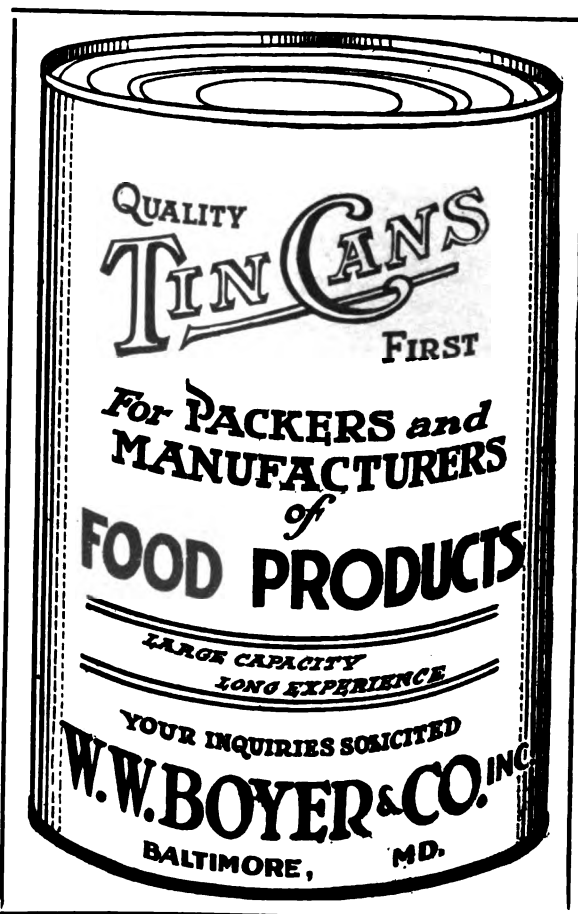
WINTER LOSSES OF COLONIES

The average winter loss in the United States is 9.4 percent, compared with 8.5 percent in the preceding winter, and an average of 12.4 percent for the seven winters preceding. Weakness of colonies or deficiency of young bees due to poor queens, short food supply late last summer, disease, etc., caused a loss of 3.6 percent; poor winter stores, causing dysentery, killed 1 percent; failure of the beekeeper to leave enough honey in the hives or to feed if the nectar flow was scanty caused starvation to 2.1 percent of all colonies; lack of proper winter protection permitted 1 percent to perish; and other miscellaneous and unspecified causes led to the death of 1.7 percent. All told almost one colony in ten was lost. The above percentages are based on returns from thousands of beekeepers, in all parts of the country.

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We have a demand for some dark extracted honey, but must be of good flavor and low enough in price. Please send samples and be sure to write price wanted f.o.b. your shipping station.

The LOUIS H. SCHOLL APIARIES
New Braunfels, Texas

SHARES OF STOCK FOR SALE

On account of a change in business party offers a limited number in one of the strongest cooperative honey producers associations in the country, in blocks of five \$10 shares, bearing interest at 8 per cent and entitling full membership and all other privileges in the organization. Those wishing to purchase write for particulars to

THE BEEKEEPERS ITEM

NEW BRAUNFELS, TEXAS

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EAGLE MIKADO

EAGLE PENCIL COMPANY

NEW YORK

The FEBRUARY, 1923
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Item

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LOUIS H. SCHOLL, Editor and Publisher
New Braunfels, Texas

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The MARCH, 1923
Beekeepers
*A Small Item In Itself,
A Big Item For Beekeepers* **Item**

DOUBLE HIVES AND SWARM CONTROL

By E. L. HANER

THAT SWARM PREVENTION PROBLEM

By H. D. MURRY

HOW I USE MIXED HIVES

By J. P. CALDWELL

HONEY STORING ANTS

By A. M. HASSLBAUER

FOUR GREAT QUESTIONS SOLVED

By W. C. COLLIER

THE DR. C. C. MILLER LIBRARY

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EARLY OREGON BEEKEEPING HISTORY

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ALL DEPARTMENTS AND NEWS ITEMS

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Letters That Tell

These letters are but three out of one morning's mail with several more that we can not print for lack of space. But these serve to tell how this publication is appreciated all over the country, for they come to us from foreign countries as well.

Mr. Louis H. Scholl,
New Braunfels, Texas

Dear Mr. Scholl:

I have received two copies of THE BEEKEEPERS ITEM and I like your clean cut bee journal, and what I especially like is your clean large print which enables one to read it without glasses, needless to say the splendid articles are of great benefit to all enterprising beekeepers. So here goes a dollar for a year's subscription and with it the best wishes for a happy and prosperous year.

Yours truly,

G. A. BARBISH,
R. 1. La Crescent, Minn.

The Beekeepers Item,
New Braunfels, Texas

Inclosed is a Two dollar check as explained on your subscription blank which I inclose.

Your paper is getting to be more valuable to me every day and I don't want to miss a single copy from now on.

I have 1921 and 1922 complete and ready for the book binder, but lack August 1921. If any copy of this issue is still available, please send me one and send bill for same also.

If any or all Volumes 1, 2, 3, and 4 can be had please let me know the price of same and I will remit at once as I have decided to have bound a complete set of The Beekeepers Item. I know the first volumes were of a different size but that is immaterial.

Yours truly,

CONRAD G. KRUSE,
Loganville, Sauk Co., Wis.

P. S.—Glad to see Mr. Scholl's picture in the December issue and am waiting for the promised articles to come.—C. K.

Mr. Louis H. Scholl,
New Braunfels, Texas.

Dear Sir:

Inclosed find check for two dollars to pay for my subscription to The Beekeepers Item. To me it is always a pleasant visitor, and I keep every copy on file. I have been so busy I neglected to send in the money last month when due.

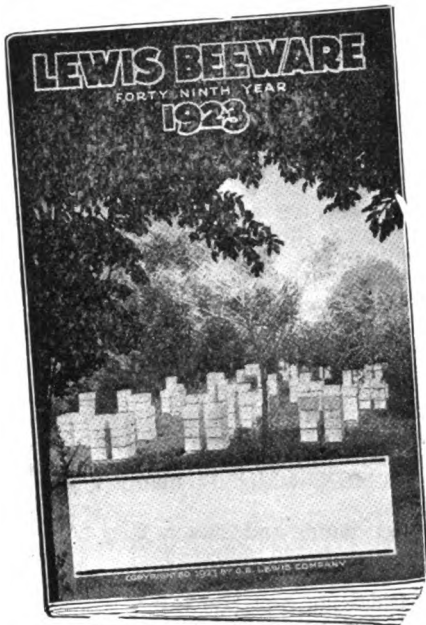
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THE BEEKEEPERS ITEM, New Braunfels, Texas

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Entered in the Postoffice at New Braunfels, Texas, as Second-Class Matter.

Louis H. Scholl, Editor.

One Dollar Per Year

VOLUME 7

NEW BRAUNFELS, TEXAS, JULY, 1923

NUMBER 7

The Fatigue Theory in Swarming

Since the Discussions on this Subject May Not have Been Well Understood the Author Seeks to Explain the Meaning of this Theory First Advanced By Him, by Going Into Greater Details of the Question

W. E. Joor

I HAVE READ the two articles by Mr. Massie that followed the article which first propounded the above theory of the cause of swarming and am glad to note that Mr. Massie is in substantial agreement with the theory which he at first violently attacked before a careful, thoughtful study of my article. I have known from his first article that he really did not disagree with the theory, but misunderstood the real basis of it. Since his first article he has evidently studied it and states it is in accord with his statements. I might suggest making it read that his statements are in accord with the theory, which was propounded first. Apparently the difficulty has been that the theory has not been well understood, and it appears desirable to state it in a more definite form without argument. There appears also to be a difference of meaning attached to terms, and before stating the theory, the terms used possibly should be made clear as to their meaning.

There has been great objection to the statement that all cells are in a sense superseded cells. Let us state it this way: that the prime object of building all queen cells is for the purpose and solely for the purpose of procuring a new queen or queens.

Regarding normality and abnormality I conceive that anything that occurs in the natural course of events is normal. If it occurs on account of some accident or unnatural condition, it is abnormal. Thus sickness, disease and fatigue to the point of complete exhaustion, even, would be abnormal. Old age and fatigue from the execution of customary duties are

normal. It is normal for a man or queen to grow old and die, to be tired after the day's work. It is normal for a queen to die and a young queen to be reared to take her place. Before the old queen dies *normally* she slackens and fails in her egg-laying, and reduces her energy, thus exercising less control over the colony and broodnest. I once read a pamphlet published by the Root Company in which it was stated that the production of drone-comb and queen-cells was restricted where the laying queen had control. If part of the hive is removed from her control, or her control withdrawn, there will be more drone-comb built and queen-cells started. I do not think the statement can be controverted.

For Mr. Massie's benefit I want to state that I heartily agree that swarming is fulfillment of the edict to "go forth and multiply," but even nature prescribes that in this multiplication there shall be a relatively certain routine followed. Certain things must occur before increase or offspring is effected.

I do not think Mr. Massie or anyone else will assert that swarming is desirable from the point of view of the honey producer or average beekeeper. To effectively control swarming we need to know the first step of the routine of nature that culminates in the swarm. There is no attempt to give a theory that is antagonistic to nature. Nature cannot be antagonized; it is too strong. Nature is the expression of God and His will in creation. But nature works in quiet, orderly processes, and if we can by any means find the beginning of these processes we may exercise some control. Mr. Massie is

real and more vivid than we who were born among its blessings can realize. To him the love of America has almost the fervor of a religious ecstasy. His eyes will dim with tears at contemplation of our flag and what it stands for. And time came, during the great war, when he could serve that flag and, along the Italian front, on the borders of his own native Carniolan mountains he saw the Stars and Stripes assist in striking off the chains and beheld the erection of Jugo-Slavia as an independent sister among the nations.

I have said all this about Jager because I want you to know the man. His story has a heart interest surpassed by few. His personality is vital, vivid, full of the temperamental attributes of the people of Southern Europe, and now intensely and passionately American.

How Francis Jager loves the bees! He has devoted his life to them. Under his care and guidance Boys' and Girls' Clubs are organized in most of the counties of Minnesota. Annually many hundreds of dollars are given as prizes for competition among these clubs. In the State University at St. Paul full courses in Apiculture are given under the instructorship of Jager, with a corps of carefully trained assistants. At the meetings of the State Beekeepers Association of Minnesota, Francis Jager is the guiding genius. Even now he is at work organizing the beekeepers of his state into a co-operative marketing agency along the lines so successfully developed in Colorado. He served as president of the old National Beekeepers Association and when the American Honey Producers League was organized he was chosen as delegate to represent Minnesota in its membership. He holds short courses in beekeeping at various points in the state every year. The picture presented herewith is of one of these held last May. The figure with a black hat, seated, and with face half turned away, is Father Jager. He is a young man, yet, and his work in Minnesota beekeeping is only begun.

The state of Minnesota has taken full advantage of the act of Congress making possible co-operative extension work and, with Francis Jager at the head of the Division of Bee Culture, in the College of Agriculture extension work, it has published many valuable bulletins on beekeeping. One can get a good idea of the wonderful knowledge that Father Jager possesses of bee behavior by reading some of these

bulletins. Special Bulletin No. 73, entitled "Habits and Activities of the Bees," is one that I wish every beekeeper could secure.

One thing that struck me was the success that has followed Jager's study of the winter problem. He is one of the very few men who has a 100% safety record. When we realize that according to government figures over 20% of all bees die in winter, it seems doubly fitting to call Father Jager "a priest with a vision in beekeeping."

San Antonio, Texas.

HONOR MEMORY OF DR. C. C. MILLER.

The beekeepers of America came to Marengo to do honor to the memory of Dr. Charles C. Miller, called among bee men, "The Sage of Marengo," and one of the foremost apiarists of the nation. A bronze tablet was hung in the Presbyterian Church by visitors, as a lasting memorial to the man whose discoveries in the realm of beekeeping brought such material progress in the industry.

Coming by motor from Madison, Wis., where they had been in annual conference and field meet, and where the dedication of the Charles C. Miller Memorial Apicultural Library took place, the beekeepers gathered at the home of N. V. Woleben where a picnic dinner was served on the spacious lawn "on the hill". Fully two hundred persons participated in the out-door dinner which was served by the social committee of the Presbyterian church, assisted by other friends.

The memorial service in the Presbyterian church was held at two o'clock and was presided over by C. P. Dadant, chairman of the library committee. Rev. A. J. Van Page offered prayer, and Mr. Dadant presented the Memorial tablet. Mr. Dadant said in part:

"The beekeepers of the world are represented here today to do homage to the wonderful man who was your neighbor and who worked here for years in such a modest way that few among you perhaps knew of his great eminence in the bee world.

"It is our purpose today to dedicate a tablet to his memory, here in the church of which he was a member. We will not tire you with long speeches, but we wish to impress upon the minds of his friends and his neighbors the good

opinion held of him, not only in the United States of America, but throughout the entire world. For that purpose I have gathered together a few sentences selected from the bee magazines of foreign countries, showing in what esteem he was held.

"As to Dr. Miller's worth to his co-workers in America, the Beekeepers' Memorial Library erected to his name at Madison, Wisconsin, and the gathering of beekeepers from all parts of the United States are sufficient evidence. It has been my good luck to be selected chairman of the committee in charge of the Library subscriptions, and I can testify to the fact that the

mony was performed by Mrs. Miller, widow of the veteran apiarist.

Judge Edward D. Shurtleff made a brief talk in which he paid a sincere tribute to the splendid character and citizenship of Dr. Miller, whose acquaintance Judge Shurtleff first made more than fifty years ago when he was a grade school pupil of Dr. Miller, then a public school teacher. Judge Shurtleff described Dr. Miller as a tolerant man, and a man of great care and detail in his work. "Dr. Miller was the greatest citizen of Marengo and this part of Illinois." was the beautiful compliment paid him by the Marengo jurist.



Francis Jager, and An Eager Out-door Audience Getting Lessons from an Ardent Instructor.

feeling of indebtedness due him, by all those who care for bees, is universal and profound."

Mr. Dadant then read extracts from obituary notices of Dr. Miller, published in *Rucher*, Belgium; Melbourne, Australia; West Maitland, New South Wales; Kati-Kati, New Zealand; Lausanne, Switzerland; Paris, France; Ansona, Italy, London and elsewhere, all indicative of the universal high regard held among the bee men of the world for Dr. Miller.

Appropriate acceptance of the memorial tablet was made by N. V. Woleben, representing the trustees of the church and the unveiling cer-

Dr. E. F. Phillips, department of agriculture, Washington, D. C., spoke of "The Place of Dr. Miller in Beekeeping," and said among other things:

"In meeting in Marengo where Dr. Charles C. Miller lived for so many years and within the church where he worshipped, the beekeepers in attendance come to pay tribute of a kind which never before has been paid to the memory of an American beekeeper. There are for his deserved distinction definite reasons, and it is fitting that this assembly includes those who knew him intimately in daily life and those who knew him

through his life work, in order that these two groups of friends may unite in expressing their happiness at having been within his range of influence.

"We meet today to place in this church a tablet to commemorate a good man. This tablet is a token of appreciation of beekeepers, and in order that their tribute shall be in keeping with the dignity of his life and character, they have also established another memorial, an endowed library of beekeeping literature at the University of Wisconsin, from the dedication of which we have just come. A proper tribute to Dr. Miller must be a useful, ever growing one, which shall last as long as beekeeping lasts, and which shall go on doing good, as he did while with us and as his good deeds continue to do in the hearts of beekeepers. The library of the literature to which he contributed so nobly is for him a more fitting memorial than any other type which could be devised. Not every man is a suitable recipient of honors of this character, and it is primarily to show in what way Dr. Miller deserves such honors that we meet here today. It is the desire of all who contributed to this library that his fame shall be as lasting as his character deserves.

"It is eminently fitting that this tablet be placed in the church where he worshipped and among the people with whom he shared the duties of religious work. Throughout his writings there runs evidence that to him the Christian religion was a masterful influence and that he constantly had in mind the opportunity to bring before others the desirability of accepting such guidance. Faith was to him not a subject for analysis and questioning. To the church he gave affection and labor. On an occasion of distress he once said: 'The Lord has always taken care of me and I am not worried over the future.' The future to which he then had special reference was the future here, yet he had the same belief in a larger future, and a short time before his death wrote a cordial invitation to an old friend inviting him to come and see him when he got settled in 'the mansions prepared for him.' In simple devotion Dr. Miller is rarely equalled. This we beekeepers know, and therefore we have felt it proper to ask that the church organization here treasure this tablet, as evidence that a good man worshipped here.

"To all the people of Marengo, we visiting

beekeepers, many of whom will perhaps not again visit your town, consign this tablet, as a mark of our esteem for one of your former citizens. We ask you to preserve this commemorative bronze, not because a group of visitors has presented it to you, but because you too appreciate the man. We ask that, as the years go by, you will show this small memorial as a visible sign to your children and to your children's children, telling them that for many decades there lived in this town a man loved and revered by thousands of beekeepers throughout the world. Show them his home on the edge of town as the place where a good man lived. We ask that you share with us and treasure the memory of Charles C. Miller and that you help us through all the years to spread his gracious influence. We leave this small tablet with you also as a symbol that progress has come in the world through the quiet and gentle influence of our beloved friend."

A solo by Rev. Van Page ended the memorial program, a program never to be forgotten because of its rare and beautiful spirit of love and eulogy. "We have not come to bury Caesar, but to praise him," was the trend of the gathering.

The day's ceremonies closed with an outdoor informal reception at the former home of Dr. Miller and visiting beekeepers were cordially received by Mrs. Miller and Miss Wilson, assisted by members of the committee.—*Marengo (Rep.) News*.

MORE ABOUT THAT "NEW" SECTION

NIC. KLEIN

Since writing my reply to E. G. LeSturgeon in the last issue, on the size of section preferred by me, it seems that it will be well to give some space to a more detailed description of it and its use.

I read with much interest an article by F. Greiner in Feb. Gleanings in Bee Culture, under the title of "Standardizing Sections," and agree to a good deal of what he says. We used the large 2 lb. section at first, then $4\frac{1}{4}$ in. square by 2 in. wide, later $4\frac{1}{4} \times 1\frac{7}{8}$ slotted, then $4\frac{1}{4} \times 1\frac{1}{2}$ plain, and now have 4×5 (Danzenbaker) and the $4\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{3}{8}$ in., which last mentioned I like the best. Never used the $3\frac{5}{8} \times 5$, but do not think deception was the cause of its invention, but the contrary, it was to get

a super having less parts and holding more sections, to rest on plain slats, five in a row with "fences" between them; no section holders, follower blocks, end blocks and wedges like all others needed. But for some reason it did not become very popular.

But the $4\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{3}{8}$ in. section is certainly ideal. It does not practice deception like is laid to the door of the 4×5 and $3\frac{5}{8} \times 5$, since its cubic contents are 27.75 cu. in., and of $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ in. plain, said to be equivalent of the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$ in. beeway, is 27.09 cu. in., so the $4\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{3}{8}$ in., is about the equivalent of the $4\frac{1}{4} \times 4\frac{1}{4} \times 2$ in. size.

Now as to the advantages of this "New" or "Special" super. The $4\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{3}{8}$ in. section is used in a section holder frame that works in the same super and is interchangeable with the shallow extracting frame, does not need any tin section holder rest like the $4\frac{1}{4}$ square section super, nor rest blocks like the Danzenbaker super, which are in the way when trying to use shallow frames. No end blocks and wedges are needed. Sections are protected against propolis on all four sides as against only three sides in all others, and if you want to use "baits" to get bees up into the super just use one or more shallow extracting frames. They all work together, same outside measure, you see, and if some of the sections are not filled on outside rows when center ones are, just set the two outside frames and their sections back into the super that goes back on the hive, thus handling all four sections at once instead of each alone and saving their separate removal from the super like in all other kinds.

I also evolved a starter fastener, partly from two I saw described in *Gleanings* and in *American Bee Journal* last year, and it also can be used to hold shallow frames while fastening foundation in grooves by a hot wax tube, as it gives it just the right slant so wax does not run away from the foundation sheet. So it does nicely to use for this size section and shallow frames, and as Mr. Sheppard says in his article in the same issue of *Gleanings*, on "Standard Equipment," interchangeability of the various parts of the equipment saves far more time and trouble than is generally realized, and again further on he states: "Utility and simplicity needs to be the foremost considera-

tion in the formation of standards for bee appliances."

Now then would it not be a lot simpler to make only one super case, which could be used interchangeably for sections or shallow frames instead of two, one for sections and one for shallow frames, like you must when you use the $4\frac{1}{4}$ square section as a standard? It surely is cheaper to manufacture only one style if it can serve both purposes and it can. Yes, with Mr. Scholl's way of using shallow frame supers as brood chambers for his divisible hive, it could be made to serve three purposes (and I propose, sometime to try Scholl's system too.)

And another thing, and not the least at that, bees enter more readily into this "Special" super than into any of the others, and that means a lot where the flow only lasts a very short time.

The reason for this is that on account of the sections being suspended in frames, there is additional open space across the ends (closed by end rests in other and standard supers) which allows for better ventilation, also bees crawl right from the entrance into supers without having to pass through the brood nest, hence are relieved of their load sooner and so, of course, ready for another trip to the field in a shorter time.

Also the resale value of this super case is greater than the standard super case since it would be adaptable to sections or shallow frames, while others can only be used for $4\frac{1}{4}$ square sections alone. And on account of high cost of lumber and equipment this must not be lost sight of. I could recite more along this line but hope others will do that so that manufacturers may know what is really preferred and act accordingly.

Hudson, Iowa.

WHO IS TO BLAME FOR BLACK BEES

— — — — —
JESS DALTON

We see a whole lot lately about the persistence of the black type. Who is to blame for this apparent persistence? We seem to give the black drone, of which the box hives and hollow trees are regular nurseries, credit for extra qualities that it is doubtful he possesses. We go even further and curtail the production of his rival, the yellow drone, in our well managed hives. It has been a puzzle to me, since

years ago when I first found myself short on drones for mating purposes, why intelligent beekeepers would not see this point.

We are no longer in the days of the "gum" and "box", where, of course, drone production was overdone. We are in the age of modern foundation comb, made especially and scientifically to combat the drone. We go even further and use aluminum combs, made throughout of perfect worker cells so that drone rearing will be at the minimum. In the face of car-lot production of this comb foundation, etc., and its use almost universally, every journal is full of advice to all beekeepers continually to "swat the drone," "scrape their heads off," "trap 'em," and similar expressions are hurled at the beekeeper every month. Go ahead and do it and let your neighbor's "gum" supply your yard with drones of all colors, and then argue over the "persistence" of the blacks and the fact that "Italian drones are not of uniform color."

Why in the world is it that the beekeeper cannot take a few lessons, (in various ways, advertising for one), from his brother the dairyman? Does the latter "swat his bull" as soon as he has bred a few cows, because said bull might eat a little feed that was very hard to sell at times? That is all we seem to have against the drone. "Oh, but he eats up our whole crop." Some of it makes me tired.

Bordelonville, La.

FOUNDATION VERSUS DRAWN COMBS

W. E. JOOR

In October Bee World, Mr. Colin P. Campbell remarks that a swarm hived on foundation in British Deep Standard frames gave more surplus than another swarm hived nine days later on British Standard (not "deep standard") frames and shallow frames over all with drawn comb. He incorrectly ascribes this, we think, to the frame sizes or difference of energy in the two swarms. We think the difference was probably between foundation and drawn combs. This may sound astonishing, but let us see:

In the case of foundation the bees had to draw out the combs before the queen could lay in them, thus delaying brood rearing and reducing the amount of food used for feeding the brood. In the case of drawn combs the egg laying began almost immediately and started probably at almost as early a date as the

swarm on foundation, hived nine days earlier. The swarm on foundation therefore had a clear gain of nine days of gathering in the best part of the flow, probably, almost all of which may have gone into the supers, as the queen was likely putting eggs into the cells on the foundation as soon as they were drawn.

Let us not get the idea from this that drawn combs are not valuable. They are of great value, especially for supering during a flow, or for rushing breeding before the flow. In the case stated they are probably at their lowest value, as breeding starts almost too promptly, using up honey; and also they will be filled with honey before any will go into the supers. Also the bees do not promptly get the "super habit." Do not expect early surplus honey from a swarm hived on drawn combs unless the breeding space is restricted. It is highly advantageous for the future strength of the colony, but not for the keeper wishing honey.

If a swarm is hived on drawn combs in a restricted brood nest, it should be carefully watched that enough room is later given it to develop sufficient strength for wintering and storage space for winter supplies. We feel that Mr. Campbell used his double brood chamber incorrectly for honey production, but we feel sure that it gave him a rousing colony.

Dallas, Texas.

WHAT MINNESOTA NEEDS

FRANCIS JAGER

We are ruining our own business by competing against each other. We undersell each other to the wholesaler who sells to the retailer, and then we turn around and undersell the jobber by selling direct to the retailer. It costs 11½ cents per pound to produce the average pound of honey in Minnesota and we are selling it at from eight to eleven cents per pound.

We need a cooperative marketing association quite as much as any other farm commodity producer does. We should make a uniform product and put on it a label that would help in spreading a reputation for Minnesota honey. A central body can do wonders for Minnesota bee culture.

St. Paul, Minn.

The Beekeepers Item, at a dollar a year.

Beekeepers Here and There

Conducted by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

The best neighbor we have is Canada. The history of the world shows no paralell to the relations of our country and the "Lady of the Snows" that lies to the north of us. Visit far south Texas and the friend you make or the casual acquaintance may have been born in Nova Scotia. Visit Alberta and your next door neighbor used to farm in Iowa. It is no wonder



DR. CHARLOTTE STRUM

then that the beekeepers of Canada and of the United States are one in unity and in method.

In Canada we quote as authority, Langstroth or Quinby or Alexander. Here we look to an Eric Mellen, an A. F. L. Sladen or an E. W. Atkins as authority for any course of action or knowledge of bee behavior.

In Texas we have one of these Canadian teachers. Our apiculture has been blessed by the fact that a daughter of Nova Scotia came to live among us. To her must be given much of

the credit for the great spirit of cooperation that pervades Texas beekeeping. She participated in the birth of our Texas Honey Producers Association and was one of its earliest larger stockholders. She saw the possibilities of the metal honey comb and assisted in the establishment of the factory at San Antonio. As an officer of the Sunny South Apiaries she has had her share in sending countless thousands of pure bred queens to the farthest corners of the earth.

Charlotte Strum, Dr. O., is a real beekeeper. Two glass observation hives on her sleeping porch lull her to sleep each night with their droning music. The habits and life of her favorite insect are an open book to her. Before the duties of the day begins she spends a half hour in contemplation of their labors. Some day we may prevail upon her to tell our readers what has been gleaned by her during these moments of personal contact and meditation.

No meeting of Texas beekeepers has been complete for many years without her presence. The thought is in our minds that no beekeeper in Texas can feel any less than we do, the grateful appreciation we wish to voice here to the "Land of the Maple Leaf" for sending to us this daughter to become our best loved sister.

I heard a little honey bee
 A buzzing 'round my chair,
 But though I looked, I couldn't see
 The insect any where.
 The buzzing ceased, I gave a yell
 And clasped my punctured skin,
 For though I couldn't see the bee
 I felt where she had been.

—Canadian Beekeeper.

TALK ABOUT SIZES OF HIVES

L. W. BENSON

I have kept bees for forty years, and I have always read and admired your writings.

Discussing the sizes of bee hives,—no Jumbo hive for me. I have, as a hired man, had to use almost every kind and size of hives. This summer, in this boasting bee county of California, I found eleven different sizes of hive bodies in one yard of 120 colonies, and more than 12 sizes of brood frames. Of course, the bees had foul brood in such a mess.

San Diego, Calif.

The Beekeepers' Item

A Small Item in Itself, a Big Item for Beekeepers.

LOUIS H. SCHOLLEditor and Publisher

Published Monthly.

Subscription Price\$1.00 the Year

Entered as second-class matter Dec. 13, 1916, at the Postoffice at New Braunfels, Texas, under the Act of March 3, 1879.

It is said that "an open confession is good for the soul." The editor feels that an "open confession" explaining why there has been a delay in the publication of our journal, will help our kind readers to understand and also to bear with him in the misfortunes which added to the cause of the situation he has been placed in during the past few months. Quite a number have already learned of this through their correspondence with us on various subjects; and our correspondence is very large, running into hundreds of letters from all parts of the country. Others obtained a part of this information from the editorial explanation in the August number. But in fairness to all it will be well to repeat that, besides editing and publishing this journal and "running" a very extensive bee business, the editor is also a commercial secretary, and of a very live chamber of commerce in his beautiful and rapidly growing home town. All this is enough to keep him quite busy under ordinary conditions, but this summer and fall he was simply overwhelmed with additional duties on every hand. First of all, the short honey crop created a situation that compelled a very material reduction in hired help, which piled a lot of burdens on the shoulders of ye editor. In addition to this the chamber of commerce work increased abnormally, especially during the heavy tourist season; and the promotion of a big county fair in the fall, fostered by the commercial organization, added heavily to the secretarial duties. "It all came at one time," explains it pretty well. However, the biggest load has been borne, and this journal will from now on receive more prompt attention. It was necessary to double up, in order to catch up, and this had to also be done with our journal. Even tho this was done our readers are getting each month's issue without omission. The January number will ap-

pear in regular form. With this explanation it is hoped that our readers will so understand the situation as to bear with us for the time being, for which we thank each and everyone of you.

TEACHING THE VALUE OF PAINT

At one time there was considerable discussion in the bee journals as to the advisability and value of painting bee hives. It will be remembered, by older beekeepers at least, that Dr. C. C. Miller was a champion of unpainted hives, and that he even went so far as to leave his own home unpainted. Generally, however, and at least in this day and time, paint is considered invaluable as a protective coat to all kinds of materials and surfaces to which it can be applied as well as to add beauty and charm in its use.

This also applies to bee hives, and to make them last longer and make them more attractive at the same time, they should be kept well painted.

In some of the states movements have been set on foot to teach the value of paint. Beekeepers will also be interested in the efforts being made.

In an effort to show farmers of Mississippi the economic value of paint the A. and M. College and State Department of Agriculture in co-operation with the local county farm bureau conducted a two weeks painting demonstration in Choctaw County.

After an organization meeting attended by the county agent, home demonstration agent, agricultural engineer, officers of the Choctaw County Farm Bureau, local editor, representatives of the Chamber of Commerce, local paint dealers and others interested, it was decided to demonstrate the use of paint on four consolidated public school buildings, located in various parts of the county. Children from 1100 families patronize these schools.

The specific idea was to teach farmers, their wives, sons, and daughters the economic value of paint and show them how to use it on inside and outside work, on implements and furniture. Twenty different paint dealers donated about \$500 worth of paint which was used in the demonstrations.

Similar demonstrations are being arranged in Georgia, North Carolina and Texas.

NOTES FROM MY OWN EXPERIENCE

LOUIS H. SCHOLL

My last notes referred to my experience in producing section honey during the first part of my thirty years of beekeeping. I remember well the time when the production of a crop of strictly fancy section comb honey was considered the highest achievement in the beekeeping art. It will be seen then that there was quite an inducement for every progressive beekeeper to strive for. The result was that section comb honey on the market from year to year showed a gradual improvement in beautiful appearance of both the comb honey as well as the package. With this the manufacturer had as much to do as the beekeeper, for the makers of supplies vied with each other in their efforts to turn out just a little bit superior grade of section box, better super equipment and shipping cases.

There was quite an evolution from the large size and rather crude comb honey boxes at first used by the early comb honey producers to the beautiful "last word" in one piece sections of the later day. This applied to both size and manufacture. While the original comb honey boxes were made of four pieces nailed together, and holding from several pounds each to the one pound size, the development drifted from these to the one piece folded basswood section of a single pound. Even in these there was a further marked change from the wide, scalloped or beeway type to the narrower plain section.

The first type of section comb honey equipment used by me was composed of large, wide frames, of the same outside dimensions as the regular Langstroth brood frame, into which eight $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$ inch four-beeway sections fitted just tightly enough to remain in place. On one side of each of these frames was nailed two tin separators at distances to go directly over the faces of both top and bottom row of sections, and leaving ample open space at top, bottom and middle for the bees to pass from one frame to another.

The primary purpose was to use these wide frames with sections at the sides of the brood chambers and get them filled there. This proved unsatisfactory because the bees spoiled them with pollen and often they would be used for brood. Then they were used in full sets of seven of these large frames and a division brood to fill an eight frame body, as a full depth

super on the hive. A trial of them soon convinced me, however, that such supers were too large for all practical purposes. Weak colonies could not take care of that much room at a time, and while some of the strongest did do so the work in a double deck super of this kind was not satisfactory. Owing to the fact that the bees store honey close to their brood nest, the lower sections would be completed at the neglect of the upper tier, except in very strong colonies. And since bees are also loath to store honey above sealed stores it became necessary to transpose the sections from top to bottom of the wide frames in order to get these also completed. But if this was not done very carefully the chances were that a large quantity of unfinished sections of comb honey would be the result after a season of hard effort of the beekeeper. I soon found that better success in their use could be obtained by placing only some of them between the combs in a full depth extracting super.

But the half depth section super supplanted all other box honey equipment; and from the original 24 one pound, $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$, two beeway, section holder super, there sprung up, as time passed, all kinds of sizes and styles. There was also a change from the square to tall sections, for which it was claimed that they appeared larger to the honey purchaser over the squatty square form.

Another change took place in the separators used between the rows of sections. From the plain tin or wood type at first used, there developed various slotted kinds that permitted freer communication and passage of the bees throughout the supers. With the advent of the plain sections came the cleated fence separators and a host of derivatives. Among them could be found the Hyde-Scholl separator, which was devised by a young beekeeper friend and the writer to meet as many of the requirements that aided in producing more and better looking sections of comb honey. Due to the difficulties in their manufacture they did not come into general use, however.

Much attention was given the matter of section honey packages. This included cartons for individual sections, plain and glassed, as well as cases of larger capacity. Finally, the shipping crates, in which the cases of section honey were sent to market received a large share of consideration.

During all that time the bee journals were filled with articles on every phase of comb honey production and styles of equipment. Each kind or method had its followers, and the discussions, both pro and con, were many indeed, interesting and instructive, and led to a gradual settlement of the entire question, or at least to the extent that the whole was sifted down to a few styles and sizes.

New Braunfels, Texas.

THE SPREAD IN HONEY PRICES.

THOS. CHANTRY

In regard to the spread in price between the honey producer and the ultimate buyer of our product I have been interested in the figures given by Mr. LeStourgeon. In asking our people here what they thought of that, in every case they said he is making too great a difference. That is too much, and so on. Then I would get them to read it over and ask them if they had to buy 40,000 one pound glass jars and pour all their cans of extracted honey into them after cleaning every one and putting a label on each one, put them into cases and take them to several different dray loads at several different times and ship them to several different parties and make as many collections, would you or could you do it any cheaper? Well perhaps not, they would say. The point that I am showing you is that in every instance where I have asked our people they have failed to get the thought of the one pound glass package as the basis for the deduction he made in that article.

You know our people out here seem to have no idea of such a small package and they think of the retail trade as the 5 pound or 10 pound pail, and mostly as the 60 pound can, and of course that is too much difference if we take his diagram and follow it through with all the package.

Now if he is not too busy I would like to see him make a diagram and explain it so that most all will not be able to misunderstand it, showing what the beekeeper should get retail for the 5, 10, and 60 pound containers when he fills them himself and sells them direct to the consumer, taking into consideration the size of each package Also how much he must get if he sells to the grocer, and how much he must get if he sells to

The Beekeepers' Item for October, 1923

a truck driver who in turn might sell to the grocer or direct to the consumer.

I have realized a long time, even before I came back from California and started up the Western Honey Producers at Sioux City, Iowa, that the hardest thing I had to run up against was the lack of business methods by the beekeeper himself, and the only help will come from education and organization. I see many other articles in other journals treating on this subject. I want to write to Geo. W. York and tell him to keep going after them for selling to everybody at the same price.

Wellington, Utah.

THE VALUE OF CO-OPERATION

J. R. HOWARD

A practical solution of the beekeepers' problem is cooperative marketing. It is a system that seeks to provide a stabilizing influence over the movement of commodities and the price at which the product is sold. A cooperative marketing association is an organization of a body of producers for the purpose of selling or distributing their individual production through the single agency of the cooperative society rather than through the individual efforts of the various members. It implies the holding of the profits in the hands of the association until such time as they may be apportioned to the membership.

Cooperative marketing put into the hands of the producer means of exercising control over the movement and distribution of his product. The greater strides we make in cooperation the greater will be our influence over the price we receive for our product.

There is a bright day coming. The producer's disadvantage of today and the temporary adversity that has come to the agriculture of America since the war have seemed a dark picture. We have been too close to our difficulties. The temporary lack of balance between agriculture and industry will be adjusted and the equilibrium restored. Today's difficulties are the opportunities of tomorrow. The producer who takes the long view ahead will prepare for the bright day that is coming. We believe in America and we believe in one another. Let us each take courage and apply ourselves diligently to the work in hand.

Tulsa, Okla.

Gossip With Our Neighbors

Discussed by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

W. E. Joor is surely making a wonderful case for his fatigue theory of swarming. The article on page 201 of the Beekeepers Item was particularly illuminating. A comparison of this theory with the advanced thought and experiments of the prominent observers of bee behavior cannot help but add to the realization that Mr. Joor has pointed out one of the fundamentals, if not the real underlying fundamental, in the cause of swarming.

Preparing and packing bees for winter is the most vital question of beekeeping yet unsolved. A great American student recently asked me what thing, in my opinion, was now the most important subject of beekeeping research. I told him emphatically that the winter care of bees was our fatal weakness. The government reports that 20% of all bees die in winter. What business, except beekeeping, could survive an annual loss of invested capital amounting to 20% or one fifth? Articles such as the one by H. A. Scullen in October York's Bees and Honey go far toward solving the problem.

Dixie Beekeeper refers in the October issue to honey dew from the pecan trees. There is a lot of misinformation about honey dew generally and we are glad that Bro. Wilder has referred to the subject. A great deal is called honey dew that is not truly such as some honey from the extra floral nectaries of certain plants is called honey dew. On the other hand some honey dew is harvested and marketed under the name of honey. We would welcome an article on the honey dews of America and a distinction between them and extra-floral nectar.

Because for October is a particularly valuable number. It treats of the wintering problem already referred to above. Such authorities as Newton Boggs, Dr. J. H. Merrill, E. C. Davis, and others give results of their experience on the subject. If you do not get Because

regularly drop a postal card to the G. B. Lewis Company and ask that a copy of the October issue be mailed you. It will well repay the one cent outlay.

In the October Beekeepers Review Frank Ridgeway has the right idea when he advocates front gate sales of honey at retailers prices. Every beekeeper should work up a direct trade on his product and should sell it all at home if possible. In doing so he should get full retail prices for his product. When a man serves the public as producer he should demand the wage of a producer. When a man serves as a retailer he should receive the wage of a retailer. When a man is both producer and retailer he should demand the wages of both.

In the Bienen-Zeitung is reported a simple manner of queen introduction that sounds like it would work. We intend to try it. Find the old queen, but do not put the combs back in the hive. Place them in another body but do not push them closely together. Scatter them apart somewhat. After ten minutes release the new queen on one of the solated combs. The bees will now be full of honey, demoralized and perhaps will feel their queenlessness. Then put all the frames back into the hive. Failure is said to be impossible.

The Beekeepers Letter of Michigan for October is mainly devoted to the uses of honey and points out that it is the duty of beekeepers to emphasize the value of honey as a pure wholesome food. The increased death rate of the United States from diabetis is correctly chargeable to the increased use of corn syrup. The following quotation is very significant: "One authority has stated that honey is so valuable as a food for children that it can be substituted for orange juice in the milk ration for babies." Mr. Kely goes on to say that he has personally known cases in which the use of honey in the milk for baby had changed weekly weight losses to satisfactory gains.

The League Bulletin for Sept.-Oct. attests that the trade mark of the A. H. P. L. is getting more and more popular. It is reported that in at least twenty states the wind shields of automobiles operated by beekeepers are

decorated with this trade mark label. This is good publicity. We hope that beekeepers in 20 more states will decide to "go and do likewise." The more we call honey to the attention of the consuming public, the better it will be for all of us.

The Beeware Bulletin is right when it says in the October issue that "it pays to know your county agent." The great work done by our corps of county demonstration agents and our wonderful and devoted home economics women are not half appreciated. Much of good could come to any of us who will take the trouble to meet these ardent and patient workers in our behalf, and counsel with them over our plans and problems.

The best report we have seen of the Miller memorial meeting and the dedication of the library at Madison, Wis., was printed in the October Gleanings. It was a source of poignant regret to this writer that he could not be present especially as he was a member of the committee and had enjoyed full part and responsibility in its activities. Because he could not be personally present he is the more grateful to Mr. E. R. Root for having given us all such a comprehensive and complete report of the meeting.

One can realize the extreme shortness of the 1923 crop of honey most readily after reading the article on this subject on page 293 of October Western Honey Bee. The report is certainly one of deep-dyed pessimism, and the pity of it all is that it is not one bit overdrawn. It is based on the government figures given out under date of Sept. 8th. Reports all agree that the honey surplus for the present year will be one of the shortest, if not actually the very shortest, ever harvested.

The inference that "there are wedding markets in the air" where drones congregate to meet the flying virgin queens, spoken of by Theo H. Frison in October American Bee Journal, seems very far-fetched to your gossip editor. There may be authenticated cases where certain bumble bees chose certain vegetation or the leaves or shade of certain trees to "deck their marriage ball," but it will have to be proven to us that this vagary is a characteristic

of the honey bee. Our opinion is that the race is to the swift and the battle to the strong, and that time or place has little to do with the fertilization of our queens.

H. B. Parks sounds a warning on page 677 of October Gleanings of the dangerous practice resorted to by some beekeepers of purchasing honey in the market with which to feed bees. Where the source of honey is known this may be a safe practice but when unknown honey is used it is extremely dangerous. Mr. C. S. Rude has done wonderful work in cleaning up American foul brood in Texas but one can of contaminated honey, fed to the bees, can undo years of patient work of our inspectors.

Speaking of the large hive the Editor of the Bee World says in October, "The doctrine that the Bee World teaches is that, so long as international standardization is propagated on the basis approved by the majority of commercial honey producers, and with due elasticity, we shall not be working on wrong lines, in-as-much as any revolution of equipment that would force itself in future would always be the result of careful consideration, and would be in full harmony with the wishes of that majority." This is true. The size, width and depth of the brood nest does not matter so much. It is the frame length that causes the confusion. International standardization will follow the adoption of the Langstroth frame length by our British brothers.

On page 214 of The Beekeepers Item, Mr. C. P. Jarman, of England, makes some observations on the male influence in queen rearing. (The printer changed Mr. Jarman's residence to Indiana, by a typographical error, for which we apologise.) In the article he says, "Given an absolutely isolated apiary, the conditions could be reversed and the best queen used as the drone breeder." This is exactly what our state apiarist hopes and expects to do in his experiment of placing an apiary and breeding station on Padre Island, off the Gulf Coast of Texas.

We admire J. J. Wilder. He is one of the most valuable men in Dixie, and we love every inch of his sturdy six feet, but he is dead wrong, in our opinion, when he advocates the use of

eight frame hives for southern comb honey production; especially bulk comb honey. His arguments in Dixie Beekeeper sounded so plausible that York's Bees and Honey reprints the article in October. The tendency is away from smaller and toward larger brood chambers. A step toward small hives would be a step backward.

In the search for the pre-Columbian bee, Western Honey Bee beats them all. On page 303, October, a report is made of some queer hexagonal crystals of carboniferous material found in the petrified forest of Arizona which the finder believes to be petrified honey. Jes Dalton, with his message from Christopher to the queen, and Wilder with his swamps, have been out-done! Before Hiawatha visited the land of fairest women, yea, before Adam gathered the week's wash from a friendly fig tree, Mr. Lummis says the bees buzzed about Arizona. Now, will Frank Pellett be good and forget his wasps and hornets?

On page 499 of the October American Bee Journal, Mr. C. P. Dadant has a fine article on the care of extracting combs. There are many frailties of wax combs and many ways by which they are lost and damaged. This fact is one of the reasons for the popularity of the aluminum combs. They are unquestionably more easily cared for. If they were never used as brood combs their use and convenience as quick storage for bees during a honey flow, and their comparative ease with which they may be taken care of is enough to ensure their popularity and extended use.

The rebuke given me by Nic Klein, on page 230 of The Beekeepers Item, will have to be accepted. I admit that all I know about the raising of section honey is what I have read. We do not raise enough section honey in Texas to endanger the basswood lumber market, for a truth. All that excited my amusement was the suggestion to standardize the size of sections and reduce the number of sizes manufactured, by *adding* one more to the list. I never was taught to reduce a number by addition. I now understand that Mr. Klein merely wants to revive the use of an old section that experience has discarded. If digging this old sec-

tion out of the ash can will *lessen* the number of sizes we are strongly in favor of doing it.

My good friend, and erstwhile adversary, Jes Dalton ought to retract what he said on page 19 of October Dixie Beekeeper. He refers to three new contributors to that interesting little journal by saying they contributed "articles on commonplace topics." For shame, Jes, there is no beekeeping topic that is "commonplace." The great mystery of bee life and bee behavior is a sealed book to man. No observation born of experience or contact with these marvelous little creatures can be rightly termed "commonplace."

La France Apicole has an interesting report of a race of bees found in French Guinea which are somewhat smaller than our bees but similarly colored. They appear to be gentle and good workers. The editor of the Bee World in commenting on them, in the October number, gives the interesting information that young bees of this race, hatched in combs used by the European species, are somewhat larger, than normal. This suggests that it might be possible to increase the size of our bees if we could devise cells slightly larger than nature provides.

We note in the October Bee World where an American beekeeper "hand-fertilized" a queen, also several since the first one. We wonder why the only notice of this has been in the Bee World and no mention of it in any American journals, nor any other mention of it in the Bee World. If it is correct this is a wonderful step forward in bee breeding. The only reason we state "if it is correct" is that it is such a forward step that we find it hard to believe. This is big news and removes the greatest difficulty that has confronted the queen breeder, that of assuring pure and selected matings for our queens, providing it is not too difficult. Let us hear some more of this.

Experience assures me that when bees are moved a long distance there are advantages which offset, partially at least, the extra trouble and cost. Such colonies invariably work better than stocks of equal strength standing in the same apiary.—Quinby.

Texas Honey Producers Ass'n

Notes by

E. G. LESTOURGEON, Manager

P. O. Box 1048

San Antonio, Texas

Condition of the Business

This has been a very hard year on the Association. The failure of the honey crop has limited the gross turnover of the business to an alarming degree and there is little hope that any profit is accruing to the members. We are doing well to be able to conduct our affairs with a minimum of loss. The Association has done a wonderful work in stabilizing prices and keeping our trade supplied in the face of such an unsatisfactory crop year.

New Fall and Winter Prices

Early in October the new fall and winter price list on honey was named by the Association. This price is the cost to retail grocers of Lone Star Honey. Do not sell a single case at wholesale at less than the subjoined prices.

6-10's Extracted, 18 cents per pound, or \$10.80 per case.

12-5's Extracted, 19 cents per pound, or \$11.40 per case.

20-3's Extracted, 20 cents pound, or \$12.00 per case.

The wholesale price on Extracted in cases or 2-60 pounds is 16 cents per pound, or \$19.20 per case.

These prices can and should be maintained. The Association will not sell at less than these prices and no beekeeper should do so.

The honey sells to the consumer now at \$1.25 for a five pound pail, retail, and \$2.25 for a ten pound pail.

How to use Para

A great many beekeepers do not understand how Para should be used. We visited a very well known prominent beekeeper, and officer of the Association, who had piled up a lot of wax and old combs, sprinkled Para over the pile and spread a wagon sheet over the whole thing. Of course, the wax moths ate it all into shreds. Why? Because the fumes of the Para, being five times as heavy as air, simply flowed away like water would have done.

We recommend that the supers or bodies with the frames be stacked in tiers of five to six feet high and stacked upon a flat surface, and covered with a flat cover or top, so that there will be no cracks through which the air can escape. Any crevices between the supers or bodies should be filled in with paper so that the air cannot get through. We use about one to two tablespoons of Para on a flat tin lid or flat paper and place it on top of the uppermost row of frames. The fumes of the Para are heavy and should go down through the frames and disinfect the entire stack. Of course, if the supers or bodies are not tiered air tight the fumes can escape and the results will not be received from it's use.

Beeswax Low in Price

Beeswax is low in price and the cash demand is very light. One of the chief causes is that the Russian church no longer uses so much of it for candles and the wax that used to go to Russia is now nearly all being exported to America. We have quotations of New York importers offering foreign wax at 20 cents per pound almost every day. Our wax has to compete with this. Our cash price is now 20 cents per pound, and we expect to maintain it so all winter.

Beekeepers need not worry. They can and should have their wax worked into foundation. Ship in your wax and let us hold it for you until you need the foundation.

WASHINGTON BEEKEEPERS ELECT

The Washington State Beekeepers' Association is in the process of organization. The following men were elected by the various County Beekeepers' Associations as officers of the State Association: G. W. York, President, W. L. Cox, Vice-President, and Miss Helen Steiner, Secretary-Treasurer. The "Second Annual Honey Week" for the State of Washington is to be held during the week of November 26 to December 1.

I am strongly persuaded that the decay of many flourishing colonies, even when managed with great care, is to be attributed to the fact that they have become enfeebled by "close-breeding," and are thus unable to resist the injurious influences which were comparatively harmless when the bees were in a state of high physical vigor.—L. L. Langstroth.

The Honey Crop Conditions

Conducted by

Miss A. M. HASSLBAUER

P. O. Box 1048

San Antonio, Texas

The rains during early September have certainly been a great relief to Texas beekeepers. A month or two ago, during July and August, it seemed inevitable that three-fourths of all the colonies would have to be fed, if indeed there would be enough bees in many of them to feed. All is changed, however. The plants all sprung into bloom as though it were spring and queens began to lay eggs enough to insure a large force of young bees to go into the winter. Some regions reported a small surplus and most reporters say that enough stores for winter has been secured.

The 1923 honey crop has been an extremely short one everywhere. Reports from all sources agree that this is the shortest in years, if not the very shortest ever experienced. It is the large producing states that have had the poorest honey crop. California only produced a very few cars. This was because of the failure of both orange and sage. Texas is importing honey to supply the home demand. Colorado and Utah both report less than half a crop. The other large producing states of Iowa, Ohio, Indiana, Illinois, and the southeastern section of Dixie all report the worst honey year in decades.

A few localities had a normal or fairly good surplus. This was true in the upper sweet clover belt. New York state also had a good crop. Alabama was the most fortunate of the Southern states.

Honey demand is excellent. The prices are tending upward. Early in October the Association named its fall and winter prices. These will be found on another page. Beekeepers need have no hesitancy in asking this price or even higher prices for any surplus they may have remaining. It is doubtful that there is enough honey in the country to supply the normal, demand.

Does it pay to read bee journals? Just ask the progressive beekeeper who does.

UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF MARKETS AND CROP ESTIMATES SEMI-MONTHLY REPORT

INFORMATION FROM PRODUCING AREAS
(FIRST HALF OF OCTOBER.)

CALIFORNIA POINTS:—Southern California: Bees are going into winter very short in stores; also many are short in brood and will be slow in breeding up in the spring even if they come through the winter. Supplies very light most beekeepers securing no surplus. No sales reported.

Central California: Honey in Inyo County mostly out of beekeepers han bees are in good shape, with some fall nectar coming in. Little honey available along the coast but one car white orange reported sold at 11½c per pound.

Northern California: Recent rains have stopped thistle flow for the season which has been below normal. Bees now working on walnut honey dew, which is black and will spoil any light honey still on the hives. Several apiaries and considerable honey burnt lurking recent fires. Bees are said to be in excellent condition and if the warm wheat continues throughout October colonies will go into winter quarters with brood nests well filled. Eucalyptus very heavy in bud.

A few beekeepers have been storing their honey in public warehouses and using the warehouse certificate as collateral on which to borrow from the banks. Few sales white star thistle reported low as 8c per pound but most sales made at 10c. Several carlots reported sold at this price and one at 10½ per lb. Some single 60 lb cans bringing 12—12c per pound and 10 lb pails 15—16c per lb. Beeswax selling at 24c per lb. Cash or 26c in trade.

PACIFIC NORTHWEST:—Bees in unusually good condition. Demand good, and honey is moving rapidly. Some distress lots extracted are selling at 10—11c per lb. in 60-lb. cans, others selling at 12½—14c, with small pails moving at 12—18c per lb. One carlot white extractel reported sold at 10c per lb while some are holding for 12c per pound in carlots.

INTER-MOUNTAIN REGION:—Colonies generally have ample stores, especially in Colorado and Utah areas where nectar flows continued until early October. Honey are in extra good shape. Colonies are being packed for winter although rain is hindering in some sections.

Demand good and improving and honey is moving out rapidly. Inquiry from carlot buyers increasing. The supply of comb honey is very short and in many districts is entirely exhausted, with numerous carlot orders refused for lack of stock to fill them. There is still considerable extracted honey available.

Prices show a wide range. Many carlots of white sweet clover and alfalfa extracted have been sold at 8c, 8½c, 8¾c, 9c, 9½c and 10c per pound with some beekeepers accepting low as 7c per pound from nearby buyers. Single 80 lb cans selling up to 12½c per lb. White comb honey shows an even wider range. In carlot sales the best stock sold all the way from \$3.50 to \$5.00 with sales at \$3.50, \$3.75, \$3.90, \$4.00, \$4.25, \$4.40, \$4.50 and \$5.00 per case. Beeswax quoted at 23—30c per lb. mostly 23—25c.

ARIZONA POINTS:—Weather favorable and colonies raising some brood. Most honey already disposed of. One carlot 1923 crop reported sold at 7½c per pound and one at 8½c with ton lot sales of 1922 crop honey reported at 7-1/8 8c per pound.

TEXAS POINTS:—As a result of abundant fall rains sufficient nectar flow has been secured so bees are brooding up nicely and many colonies will store more than sufficient for winter stores. Demand good for chunk honey and moderate for extracted but in many sections beekeepers will not have enough honey to supply local orders. Few sales reported of light extracted at 12½—16c per pound and of chunk at 16—17c.

PLAINS AREA:—Honey plants are in good condition for next year as a result of frequent rains and bees are generally in good condition. Some colonies, however, did not secure a pound of surplus and must be fed. Market strengthening. Carlots of white extracted quoted at 10c

per pound, ton lots at 10—11c, single 60 pound cans at around 12½c and small pails at 12½—13c.

EAST CENTRAL and NORTH CENTRAL STATES:—Over a considerable area bees stopped breeding unusually early as a result of cold rainy weather, thus lessening chances for good wintering, many colonies, especially in Ohio and Wisconsin, must be fed. The rains have placed honey plants in most sections in good shape for next year. Honey is moving well. Prices show a wide range. Carlot and tonlot sales of white clover extracted reported at 9½—12c with single 60 pound cans moving at 10—15c, mostly 12½—15c and small pails at 13—22c mostly 14—18c per pound. Dark extracted quoted at 8—9c per pound. In 60 pound cans or 11—13c in small pails. Number one white comb sold all the way from \$4.25—\$6.00 per case, mostly around \$5—\$5.50.

SOUTHEASTERN STATES:—Ample stores assured in most sections except the black belt of Alabama. Mexican clover and other fall flowers are producing nectar in Georgia and wild sunflowers are yielding in Florida. Fine flow from spanish needle secured in Mississippi. Where requeening is not properly done, some equalizing for winter and some spring feeding may be necessary. Demand for chunk honey exceeds supply; fairly good demand for extracted. It is thought that comb honey production will increase next season. Few sales reported light amber extracted at 8—10c per lb. and of amber at 6—8c. Small pails light amber are selling at 14—18c per lb. Some sales of beeswax at 13c lb reported.

NORTHEASTERN STATES:—Frost has definitely ended fall flow (which in many areas was unusually light because of proceeding cold weather) and bees are being packed for winter. As a result of cold weather bees stopped breeding early but otherwise are in good condition. Condition of honey plants appear to be spotted. The lessening fall flow will necessitate considerable feeding.

Shortage in comb honey supply has increased the demand for comb honey, and many beekeepers have sold their entire production. Extracted is not in such good demand as comb but considerable has been sold. While extracted has been selling around 10c per pound in carlots 9—12c per lb in ton lots, 12½—15c in single 60 lb cans and 12—20c, mostly 15—18c per lb, in small pails. A carlot sale of buckwheat reported at 9c per b, tonots at 9—10c, single 60 pound cans at 11—12½c and small pails at 12—18c per lb. Three carlots comb reported sold at a flat price of \$4.00 per case for all grades, smaller lots white clover comb have sold \$4.50—\$5.5 per case. Buckwheat comb quoted at \$4.00—\$5.00 per case. Beeswax bringing the beekeeper 27—35c per pound according to color.

PORTO RICO:—Nectar flow is still on in the hill sections. Fair showers reported over the entire island. Prices unchanged. Amber extracted quoted at 5-3/4c per pound to the beekeeper.

TELEGRAPHIC REPORTS FROM IMPORTANT MARKETS.

Arrivals cover receipts for preceeling two weeks. Prices represent sales or current quotations, as secured from the original receivers but must not be understood as attempting to fore cast future market conditions or prices in any degree. Market condition comments represent the opinion of the trade, and their accuracy is not guaranteed by the Bureau of Agricultural Economics. Market reports are for October 13 or 15th.

BOSTON:—Since last report 430 cases, Vermont 64 cases New York 100 Bbls., Porto Rico 150 cases Calif. arrived. Supplies increasing. Demand and movement moderate, mkt firm.

COMB—New Stock, New York 24 Section cases white clover No. 1, \$5.50 —\$6.00 Vermont 24 section cases white clover No. 1, heavy \$5.75—\$7.00; light weight \$5.00—\$5.75, 20 section cases heavy \$4.75—\$6.00, light weight low as \$4.

EXTRACTEDS—Sales to confectioners and wholesale grocers per pound Porto Rico Amber 9—9½c, California white sage 16c, light amber sage 13—16c.

CHICAGO:—Since last report 1 car Calif. and 1 car

Idaho arrived. Demand and movement good, market steady to firm.

EXTRACTEDS—Sales to bottlers and confectioners, per pound, Idaho white sweet clover 11—11½c. Wisconsin and Minnesota, white clover mostly 11½ c. Wisconsin White bass wood 12½—13½c. California light amber mountain flowers 10—10½c.

COMBS—Sales to Retailers, Illinois, Wisconsin and Iowa, white clover No. 1, \$4.50—\$5.00 few high as \$5.25, No. 2 \$4.00—\$4.50.

BEEWAXS—Receipts moderate. Demand and movement moderate, market steady. Bleachers and wholesalers paying per pound for Colorado, California and Idaho, light 29—31c, dark 25—27c. North America light 24—27c, dark 20—22c.

KANSAS CITY:—No carlot arrivals since last report. Supplies light. Demand and movement good market strong. Sales to jobbers, Comb 24 section cases Colorado, white alfalfa No. 1, \$6.00 Extracted: Colo. Alfalfa Water White 12c. Light amber 11c per pound.

MINNEAPOLIS:—**COMBS**—Supplies light. Demand movement slow, market firm. Sales toretailers 24 section cases Minnesota White Clover No. 1, \$5.50—\$5.75.

EXTRACTEDS—Supplies light. Demand slow, market steady. Sales to retailers, confectioners and bakers in 5 gallon cans, per lb., Minnesota white clover 13c, Western Alfalfa and sweet clover mixed light amber 11c, white 16c.

NEW YORK:—Domestic receipts moderate. Demand and movement moderate. Market steady.

EXTRACTED:—Sales to jobbers, wholesaler, confectioners, bakers and bottlers, Domestic per lb. Intermountain white sweet clover 11½—12½. New York white clover 11½ 12c, buckwheat 10c. California, white orange very few sales 14c. Imported, receipts liberal and include 292 bbls, Porto Rico 25 bbls., Mexico 20 cases Greece. Demand slower, market slightly weaker. Porto Rico 95—90c per gallon.

BEEWAX:—Domestic receipts moderate. 7 seroons San Domingo, 131 bags brazil, 64 bags Chile, 50 cases Germany, 8 bags England arrived. Demand and movement moderate, market dull. Chile and West Indies, light 27—28c. Brazil and Italy light 25—26c. Africa and West Indies, dark 21—22c.

PHILADELPHIA:—No large arrivals since last report. Holdover supplies very light. Demand increasing, market firm.

EXTRACTED:—Sales to manufactureres and bakers, per gallon Porto Rico, light amber 96c, fancy 98c. Southern Light amber 98c.

ST. LOUIS:—Since last report one car Calif. and 1 car Colorado arrived. Supplies moderate. Demand and movement moderate, market steady. Sales direct to retailers.

COMB:—Colorado white clover \$5.75 per 24 section case. **EXTRACTED:**—Per lb. California light amber alfalfa 9½c. Souther dark amber mixed flavor 8c.

BEEWAX:—No receipts reported since last report. Dealers quoting 26c per lb, to producers for country run was.

H. C. TAYLOR,
Chief of Bureau.

LIVERPOOL HONEY REPORT.

The past month has shown no improvement in prices due to stagnation of trade. There is only one consolation, that it is reported that the crop of Chilean is nearly exhausted out there and consequently we may expect the arrivals from that quarter to diminish in quantity, and with the approach of winter we should have a more active demand.

BEEWAX remains in about much the same position as last reported. There have been small retail demands which have not amounted to much and there is no change in the values. We quote Chilian £6.15 to £7, Jamaican £6.15, West African £4.15 per cwt., The value in American money is about 28 to 29 cents per lb.

TAYLOR & CO.

Liverpool, England

THE BEEKEEPERS ITEM

A SMALL ITEM IN ITSELF, A BIG ITEM FOR BEEKEEPERS.

Entered in the Postoffice at New Braunfels, Texas, as Second-Class Matter.

Louis H. Scholl, Editor.

One Dollar Per Year

VOLUME 7

NEW BRAUNFELS, TEXAS, NOVEMBER, 1923

NUMBER 11

Does It Pay, and What to Feed Bees?

Experience that Tends to Substantiate that Sugar Syrup Lacks in Certain Food Elements Which Are Necessary for the Proper Health and Welfare Of the Queen and Colony, and that It Pays to Feed Honey

H. D. Hurry

AS TO WHETHER OR NOT it pays to feed bees, much will depend upon locality. I can imagine a locality where the net results from a colony of bees is so small till it is not worth while to make any efforts to keep it alive. But, in any location where bees are ordinarily profitable, I should say feed, if late fall find the colony short of winter stores.

This brings us to the question, "How and what to use as food?" Answering the question categorically, I should say feed combs of sealed honey, and feed them before cold weather sets in during the fall, or at any time when the colony runs short of stores. Lacking the combs of honey, the next best thing is extracted honey, well ripened and of good quality, from a known source so there may be no danger from diseases. This may be fed at any time when bees can fly by turning down a pail of the honey on top of the brood combs of the colony having a few small nail holes puncturing the lid of the pail. I have reference to the friction top pail as used by the beekeepers to pack honey for market.

There was probably no more successful beekeeper in the United States or a better authority upon apicultural subjects than Dr. C. C. Miller of Marengo, Illinois; and he long advocated the feeding of honey to bees, and opposed the practice of feeding sugar syrup. Also, he practiced what he preached, not having fed an ounce of sugar to his bees in many years; but he saved up combs of honey and fed them to his bees as they needed feeding. He had certain colonies in his yard whose sole business it was to store these combs of honey to be used

to feed the other colonies, in case they needed feeding. And he believed that this practice resulted in an improvement of his bees. He said it was his belief that if bees are fed a diet of sugar syrup long enough, even with the addition of pollen, that they will die of anemia.

I have myself passed through an experience a few years ago that seems to substantiate the Doctor's belief. Before entering upon the details of that unfortunate experience, I want to refer to a series of articles appearing in the American Bee Journal for March and April, 1918, by R. Adams Dutcher, Division of Agricultural Biochemistry, University of Minnesota. He says "Chemical analysis shows all living organisms to be composed of chemical substances which are being continuously broken down and rebuilt during the life of the organism. In order that the organism may best perform its natural functions it is necessary that the right kind of chemical materials be furnished in correct proportion and in sufficient quantity. The chemical substances which are present in the food materials of higher animals and which must be present for normal growth and development are (1) protein, (2) the fats, (3) the carbohydrates, (4) mineral salts, and (5) growth stimulating substances, sometimes known as vitamins. The author then goes on to give tables showing the chemical contents of various food materials. From these tables we learn that honey contains all the elements necessary for the proper development of the bee, to sustain its life and to rebuild wornout tissue, while sugar is a pure carbohydrate whose sole function is to supply fuel material for the body.

I think that these statements coming from such high authority we may consider as final.

It was my misfortune last year to lose most of my bees in the great drouth in Southwest Texas in 1917. I loaded what was left of them in a car on the 15th of August, and arrived in North Texas with them on the 20th, many of the colonies in a starving condition and some actually dead. Cotton was yielding nectar when I arrived, but a wet spell put a stop to that and my bees were able to gather only a little from fall flowers. Frost came on the 9th of October, and on account of the shortage of sugar I was not able to get the sugar to feed my bees up for winter till late in December. By this time the bees had consumed all the honey they had gathered. The weather too, had become cold with frequent rains which kept the roads so muddy till there was no getting over them with the feed for the bees. However, I would take advantage of every warm spell and feed as best I could, using a syrup of $2\frac{1}{2}$ or 3 parts of sugar to one of water. This I fed in 3-pound and 5-pound pails turned down on top of the brood combs. Some colonies were fed hard sugar candy, but they mostly died. The bees did not seem able to manage the candy unless they had packing above the candy, and I was not always able to find the old sacks and such things with which to pack them. So I discontinued feeding candy and fed only syrup. I lost about 65 per cent of the colonies during the winter, mostly from starvation, not always being able to go to them to feed them. Some died leaving more or less syrup in the combs. Just how much of this was attributable to lack of proper food and how much to the extreme cold, I am not able to say.

But now comes what is to me the most interesting result of the experiment. When spring had come and brood rearing began to advance, the queens began to die. Every visit to a yard would discover that a few queens were missing. They just disappeared suddenly, without the bees having made any preparations to supersede them. This trouble began well along in the spring and continued and grew worse till our first nectar began to appear from sweet clover, about the middle of May. As soon as the bees were able to gather their natural food from the fields the trouble ceased and did not again appear. In casting about for an explanation of the trouble, I think the articles by Mr.

Dutcher referred to will fully explain. It is the only explanation that occurs to my mind. We all know that bees are not able to convert sugar syrup into honey. Sugar syrup does not contain the necessary elements for the proper development of the young bees, nor for replacing wornout tissue. All these elements are required by the queen in performing her natural functions, and unless they are supplies to her in her food she must draw upon the resources of her own body. This she is not able to do except for a limited time. As a further evidence of the correctness of these conclusions, I had one yard about five miles from town where there was an occasional light flow of nectar from sources that are not available to the other yards, and the loss of queens at this yard was comparatively light. One yard in town where I started into winter with twenty-five queens, lost twenty-two of them during the spring. Of those remaining, one was an old breeder whose colony was not fed any sugar syrup. One stopped laying entirely before sweet clover began to yield and resumed laying after the yield began.

I have mentioned an old breeder that I wintered on honey. It is my practice to draw combs of brood from a favorite breeder whenever she begins to get too strong in bees and brood. I do this to prevent the queen from wearing herself out laying, and cause her to live as long as possible. After spring opened up I drew a comb of brood from this hive from time to time till I had drawn five combs from her colony. Then I began to form nuclei with the combs drawn and formed seven nuclei with such combs, six of which put up a normal amount of surplus from cotton, and one was used as a mating hive for queens. The old mother continued doing business. Contrast this increase of 700% with 71% from those wintered on sugar syrup. Probably a part of this extraordinary increase is to be attributed to the fact that this old breeder had been an extraordinary queen, but I feel sure that part of it is to be attributed to the difference in the food upon which they were wintered.

Reducing the results to dollars and cents, the bees that I wintered on sugar syrup cost me \$2.15 per colony paid for sugar, and I have been able to increase them 71 per cent. The one wintered on honey cost me in honey, \$2.25, and I have increased it 700 per cent, saving

nothing of the five frames of brood I had already drawn before I began making the increase.

I am well aware that many good beekeepers will take issue with me when I state that it pays to feed honey for winter stores instead of sugar syrup. One good bee man writes me that he has fed tons of sugar for winter stores and never had any adverse results from doing so. My reply to him was that I also had fed tons of sugar; but in every case there was either some honey in the hives, or the bees able to gather nectar from the fields early in the breeding period the following season. Honey is the natural food of the honey bee and nothing else will quite take the place of it.

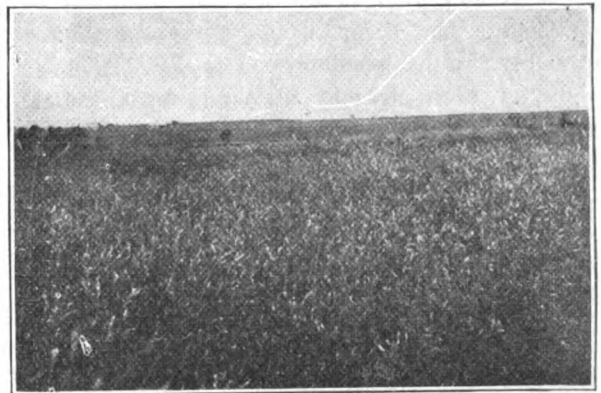
Considering all the evidence before me, it is my conviction that the beekeeper who leaves

SWEET CLOVER IN NORTH TEXAS

W. H. McFADDEN

Some time in the winter of 1918 I wrote you about having planted some sweet clover. Since then it has done well and bloomed profusely. The accompanying views will give you an idea of the profusion of growth and bloom. The bees were busy on it and horsement, which blossoms during the same time, and yielded some nice surplus. It comes in very fine to build up strong colonies for the cotton honey flow, which comes later.

Cotton is our main honey source and we get our surplus from it. With the sweet clover, and horsemint preceding it the colonies, including all natural and artificial swarms, get in nice shape to work on cotton.



Sweet Clover Planted for the Bees by W. H. McFadden, in North Texas.

his bees plenty of honey when taking off his crop will lose nothing thereby. And if he has to feed, and buy feed, it will pay him to buy honey to feed them.

Mathis, Texas.

LEAGUE CONVENTION AT CHICAGO

By action of the executive committee the next annual convention of the American Honey Producers League will be held at the Great Northern Hotel at Chicago on January 24 and 25, 1924. The sessions will be largely devoted to business matters with a small number of prepared talks of interest to the public.

When our crops have been short and times seem hard, it is that we must buckle down the harder to gain success in our undertaking.

From the pictures of my sweet clover patch you can judge its height. I have four acres that I use for nothing else but for my bees.

I raise section honey and get thirty cents a pound. Being near a large town I have a good home market and a fine trade.

At some future time I will write you about the hive I use, which is not of the so-called "standard" size.

Howland, Texas.

The Busy Bee is a new publication. It is issued by the Heart of American Association, at Kansas City, Mo. It is particularly devoted to the beekeeping problems of Missouri. Mrs. C. W. Baxter is editor.

Does it pay to read bee journals? Just ask the progressive beekeeper who does.

ARE BLACK BEES DOMINANT?

W. E. JOOR

The writer has been very much interested in the articles on the above subject that have appeared in the recent bee journals, especially one of Mr. LeSturgeon on page 214 of *American Bee Journal*. It is thought that Mr. LeSturgeon has overestimated "the countless thousands of black hybrid queens killed by beekeepers every year and everywhere, and replaced by golden or three banded mothers." Many, very many, of the queens replace old but pure queens and not black or hybrids. Probably 30% of them are so used. Also many are shipped to foreign countries. The queens that are not exported are sent all over the country but probably to not more than the owners of 10% of the colonies of the country, if the wild and uncared for bees are included in the count. The writer would guess there were probably, in the neighborhood of 5,000,000 colonies of bees all told in the United States. Ten per cent of this would make 500,000 queens, but probably 100,000 would be nearer the queen production of the country by commercial breeders, or queens used away from where they were reared. All of the above figures are approximate guesses. The idea is that the number of Italian queens is relatively small and located in small centers surrounded by whole hordes of the natives.

A man having an apiary of say, 100 colonies, is surrounded by possibly 200 of wild and carelessly kept hives of bees. He brings in, we will say, an average of five pure queens per year and perhaps raises fifty more. These fifty will mate with the drones of the neighborhood of which there are probably fifty to one Italian, but due to the proximity of the latter perhaps twenty of the fifty queens mate purely. The wild bees also get a sprinkling of the Italian drones. In this way the Italian influence gradually penetrates, but as the native is in the great majority it is very slow in becoming Italianized itself and all the time is reacting on the single point of Italian infection. A drop of native "blood" will have its effect down through the generations following the Mendellian law. So the only way would be to remove all individuals that have this taint. That is impossible among the wild and uncared for colonies. So, irrespective of the prepotency of either race,

this native effect will be with us, but its presence is no indication of the prepotency of the blacks. A drop of negro blood in an otherwise pure Caucasian will show sporadically down the following generations, and vice versa. Still we do not acknowledge that the negro is a more dominant race.

The fact is that the native bee in its purity has nearly disappeared and that with a relatively small introduction of Italian queens, and in the short time of sixty years, of which time the first half showed a very much smaller intrusion of the Italian. The Italianizing influence has been accelerating at a rapid rate, and if kept up at the same rate within another sixty years the blacks will have disappeared except for sporadic manifestations. That does not to the writer look like a lack of prepotency of the Italians. In fact the writer thinks that a careful, logical viewing of the conditions will prove the Italian the far more dominant race. There will always be sporadic evidences of the native, until the wild bees are completely removed, but the showing and effect will gradually grow less as time passes.

Regarding the black drone being noisier and swifter, let us think for a moment. Noise is not an indication of swiftness in flying. The fastest birds make the least noise. Also a drone makes more noise than a worker. But the worker is very much the swifter. I do not believe the black drone either swifter or more alert than the Italian. His effect is only due to numbers. I however, do agree with Mr. LeSturgeon that we should not too closely restrict father Italian, but even under present conditions we are not losing the fight. We are making progress. There are fewer pure natives and more Italians today than ever before in this country. There are many locations in which a pure Italian yard could be neglected for a number of years and show hardly any native infringement. Not that the Italians would not get darker, for they would generally. This would not be because of the natives however, but because Americo-Italians are lighter colored due to breeding by selection from the darker Italo-Italians. Such light color is not yet fixed and there would be a reversion to the original color of the Italo-Italians which was so dark that a bee had to be distended with honey and put on the glass in the window before the third band would show. Many seeing such a bee these days would say it was hybrid when as a

fact it was absolutely pure. Langstroth, Quinby and Alexander all recommended breeding for lighter color so purity could be more easily proven.

Mr. LeSturgeon's recommendations are all right as regards the encouragement of rearing more pure drones and restricting the impure. We are making great progress and if we keep on we will eventually win out.

Dallas, Texas.

IMPORTATION OF QUEEN BEES

Regulation 4 of the rules and regulations prescribed by the Secretary of the Treasury and the Secretary of Agriculture in accordance with the Act of August 31, 1922 (Public No. 293—67th Congress which went into effect May 15, 1923, is as follows:

Regulation 4. On representation by any person to the Department of Agriculture that there is adequate necessity for the importation of adult honeybees for experimental and scientific purposes, from any country other than those determined by the Secretary of Agriculture to be free of all diseases dangerous to adult honeybees, the Department of Agriculture will undertake to import such adult honeybees under the first proviso of the Act for the purpose intended, when the Department shall determine that such importations can be made without risk to the beekeeping industry of the country.

(2) All shipments of adult honeybees made for experimental and scientific purposes shall be addressed to the United States Department of Agriculture, Washington, D. C., and shall be subject to such examinations and holding in quarantine as may be necessary to determine the freedom of the shipment from diseases dangerous to adult honeybees. It is understood, as a further precautionary measure, that the Department of Agriculture will destroy all the worker bees accompanying such imported queenbees and will provide fresh worker bees and a fresh mailing cage for each such shipment. Any such importation made for experimental and scientific purposes which is found to be infected with any disease dangerous to adult honeybees may be destroyed or returned to the country of origin, at the option of the Department of Agriculture and no shipment will be distributed until the Department of Agriculture is convinced that the adult honey-

bees therein contained are free from all dangerous disease. Any persons receiving adult honeybees distributed by the Department of Agriculture shall agree to the re-examination of the shipment from time to time, at the option of the Department, and shall relinquish the shipment and any increase therein to the Department of Agriculture for destruction or safeguarding, should any diseases dangerous to adult honeybees at any time develop in connection with it.

Information is not at present available as to the number of queenbees which are urgently needed for experimental and scientific purposes, but the number of such importations will necessarily be limited by the Department's facilities for examining the imported material and for keeping the imported queenbees in quarantine for such time as may be deemed essential. In order, therefore, to limit the volume of such importations and to insure that the queenbees shall be imported solely for experimental and scientific purposes, as provided by the law, and in order adequately to safeguard the beekeeping interests of the United States, the following special rules are announced to govern such importations:

(1) Importations will be limited to the following classes of institutions and persons:

(a) Public institutions, such as Agricultural Colleges, Agricultural Experiment Stations, and similar institutions, which desire to conduct investigations on the various races of honeybees, may obtain queenbees through importation by the Department of Agriculture for such experiments.

(b) An individual, who can show that he is engaged in some special field of experimental and scientific work in beekeeping or with honeybees, may, on a satisfactory showing of scientific training and experience requisite for such work, obtain queenbees through importation by the Department of Agriculture for that purpose, provided there is reason to believe that the proposed experimental and scientific work will have value as a public service.

(c) Commercial queen-breeders, who urgently need queenbees for breeding experiments, may apply to the Department of Agriculture to have the necessary importations made. Such an application shall contain, or be accompanied by, evidence that the applicant is engaged in the rearing of queenbees on a commercial

scale and shall indicate the purpose of, and the necessity for, the importations. If an applicant is not well known to the Department, he may be required to submit a list of persons qualified to substantiate statements made regarding his ability and standing as a breeder of queenbees.

(d) The Department of Agriculture does not consider that the experimental and scientific purpose for which importations may be made under said Regulation 4 includes the importation of queenbees for individual beekeepers merely for the purpose of requeening their own apiaries. In case, however, queens of certain races cannot be obtained in the United States, and the testing in the United States of such races would be of value to the beekeeping industry, the necessary importations will be made by the Department, provided that those who make request therefor, and to whom the queens are to be distributed for experimental and scientific purposes, will agree to report to the Department twice annually on the merits of such races in comparison with races already known in the United States. Applications for such importations must show that it is impossible to secure such queens from commercial queen-breeders in the United States.

(2) Persons, institutions, and others, in urgent need of imported queenbees for experimental and scientific purposes, may submit a statement of their needs to the Department of Agriculture, giving the name and address of the foreign queen-breeder from whom the queenbees are desired, and, if approved, the Department will transmit an order to the breeder in the foreign country from which such queenbees are desired. No orders for imported queenbees will be placed by the Department of Agriculture with any but experienced and recognized breeders of queenbees in foreign countries and evidence must be presented by the applicant that the foreign queen-breeder is qualified to rear good queenbees and to mail them in a satisfactory condition.

(3) In the event that importations are made and the queenbees die enroute, the Department of Agriculture assumes no responsibility whatsoever, either in the shipment of the queenbees from the foreign country to the Department of Agriculture or in forwarding the queenbees to the person at whose request the importation was made. Every care will be exercised so that the queenbees may be safely mailed under the

restrictions laid down in said Regulation 4. All shipments of queenbees will be made in accordance with the regulations of the Post Office Department governing such shipments in domestic mails.

(4) All persons receiving queenbees from foreign countries distributed by the Department of Agriculture shall agree further to cooperate with the Department in such additional examinations of the colonies containing the imported queenbees or their offspring, as shall be deemed necessary to protect the beekeeping interests of the United States from the introduction of diseases dangerous to adult honeybees. In the event that any later examinations of the offspring of the imported queenbees is deemed necessary by the Department, the person receiving the imported queenbee shall agree to furnish the bees desired promptly or to permit such examinations by a representative of the Department as may be deemed necessary. Any person receiving such imported queenbees from the Department of Agriculture shall further agree to notify the Department immediately if any abnormal conditions are seen in the adult honeybees in the colony headed by the imported queenbee, or in any other colony in the same apiary, so as to permit immediate examinations of any apparently abnormal adult honeybees.

The foregoing special rules are hereby adopted and shall be in force until further notice.

(Signed) *C. W. Pugsley,*

Acting Secretary of Agriculture.

June 19, 1923.

Washington, D. C.

The Australian Government has made an exception of the United States in prohibiting importation of adult bees to prevent introduction of serious diseases, according to the Official Record, Washington, D. C.

I once used to be surprised to hear so many beekeepers speak of having "good luck" or "bad luck" with their bees; but really, as bees are generally managed, success or failure *does* seem to depend almost entirely upon what the ignorant or superstitious are wont to call "luck."
—*L. L. Longstroth.*

Clubbing any of the other journals with this one will save you some money.

Beekeepers Here and There

Conducted by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

Is anything lost or mislaid around the association office or warehouse at San Antonio, Texas? Ask Biggs, he will find it. Is there a hurry order just come in that *must* go out tonight? Ask Biggs, he will stay after hours and attend to it. What will it cost to send a bee hive, three excluders and an uncapping knife by parcels post to Podunk Center? Ask Biggs, he knows. Did some thing go wrong and was



F. W. BIGGS

an error made in Deacon Holmes order? Ask Biggs, he will rectify it.

Festus Watts Biggs was not made a beekeeper by fate or by choice or by nature. He just simply acquired beekeeping by absorption. When the Texas Honey Producers Association was organized, now nearly eight years ago, F. W. Biggs seems to have been adopted along with its by-laws and plan of operation. He just simply always has been a sort of fixture, an integral part of the machine.

Did you ever realize the work done by the

differential of your auto. It takes all the jars and jolts of sudden start or stop or turn. It is very seldom seen or remarked upon. It never makes a noise like the horn does. It does not shine like the head-light. It is not puffed up like the casings. Its job is to do the work, to do it noiselessly and efficiently and well. Biggs is like that. He is our differential. He takes all the jars and jolts, the complaints and uncertainties and irons them out for all of us.

Mr. Biggs was born in Frenton, Tennessee and lived for some years in Florida before coming to Texas. He was connected with the Southwestern Bee Company for many years until the co-operative association was organized, when he came into its service as shipping clerk and general factotem of the stock room. His duties have grown or shrunk as the association business expanded or fell away. One hour sees him acting as office boy or bookkeeper; a difficulty in the honey room calls him to act as shop foreman there; suspicion of adulteration in a shipment of beeswax calls him to the receiving room to act in his capacity as chemist. Now here, now there, wherever the stress or the strain is heaviest we find Mr. Biggs, smiling and busy, doing all in his power to keep the machinery in order and the gears well lubricated.

Does it take any tact or skill to run an association of honey producers without friction? Ask Biggs, he has had experience.

In the November Bee World, page 94, Kenneth Hawkins remarks on "The invention of the movable comb hive by Langstroth and Quinby concurrently." We wonder if he really intended that? It is an established fact that Langstroth invented the movable frame hive, opening from the top, with a bee space surrounding each frame. Quinby invented his standing closed end frame hive, but Huber had a hive very similar to it in arrangement. The hanging Quinby frame was only a Langstroth frame of different size and was developed by Quinby at a later date, after he was familiar with Langstroth's invention, and Quinby publicly wrote giving Langstroth the credit and claiming only what he thought was an improvement on Langstroth's frame. Quinby did not invent but only modified the size. We have his own word for it.

The Beekeepers' Item

A Small Item in Itself, a Big Item for Beekeepers.

LOUIS H. SCHOLLEditor and Publisher

Published Monthly.

Subscription Price\$1.00 the Year

Entered as second-class matter Dec. 13, 1916, at the Postoffice at New Braunfels, Texas, under the Act of March 3, 1879.

CHANGE OF ADDRESS: When a change of address is ordered, both the new and old must be given. The notice should be sent as promptly as possible before the change is to take effect.

DISCONTINUANCES: Notice will be given just before expiration. Subscribers are urged, if unable to make payment at once after expiration, to notify us when they can do so. Any one wishing his subscription discontinued should so advise us upon receipt of the expiration notice; otherwise it will be assumed that he wishes **THE BEEKEEPERS' ITEM** continued and will pay for it soon.

ADVERTISING RATES: These will be furnished upon application.

Rain, Rain, and more rain, has been the order of the day, in the biggest part of the great Southwest at least. Reports from other sections are also to the effect that there has been a good deal of rain this fall. In most portions it came too late to be of much help to the bees for this season, but it adds materially to the prospects of another year. To many localities the rains were early enough to help much, and there the bees gathered heavy winter stores and even surplus in some cases. Most valuable was the fact that the colonies reared a large number of young bees to go into winter, and which will be a great help in bringing them out strong in the spring.

Prospects for another year are quite promising. With the bees and honey plant conditions very favorable generally, the market almost bare of honey and prices quite favorable, there is hope for the beekeeper to make a crop and find a market for it. Just how near we will "hit or miss" next year is difficult to anticipate even, as experience during the last several years has shown that one can hardly do more than guess at what is going to come to us in the way of a honey harvest. Predictions based on similar conditions ahead of the season have miscarried so often lately that it does not seem wise to bank too strong on a crop until it has been actually made.

"Queen Rearing Simplified," is the title of the latest book on queen rearing, and a copy has just reached the editor's desk. Jay Smith, of Vincennes, Ind., is the author. It is a very beautiful volume with an exquisite embossed leather and gold cover, and its contents are exhaustive and profusely illustrated. Jay Smith, the queen breeder, is well known to our readers. Who has not seen the picture of him with a full beard of bees in the journals? In getting out this new book his primary object was to assist the honey producer in rearing his own queens, but he also describes methods adapted to the amateur as well as the commercial queen breeder. His object, to present with the aid of photographic illustrations, methods with variations as used by him for twenty-one years, and to describe these in detail so any one wishing to rear queens can succeed, and in case of failure, he may refer to the book and find the cause of it, is highly commendatory of this new work. The A. I. Root Co., Medina, O., are the publishers.

HERE IS ONE ON COOPERATION

Through our friend, J. Skovbo, we received the following poem on co-operation, and about which he writes us that the credit of locating it belongs to Mr. B. A. Slocum, of Pullman, Wash.

A COOPERATION FABLE.

Said a wise old bee at the close of day,
 "This colony business doesn't pay.
 I put my honey in that old hive
 That others may eat and live and thrive;
 And I do more work in a day, be gee,
 Than some of the other fellows do in three."

So the old bee flew to a meadow alone,
 And started a business all his own.
 He gave no thought to the buzzing clan,
 But all intent on his selfish plan,
 He lived the life of a hermit free—
 "Ah, this is great," said the wise old bee.

But the summer waned and the days grew drear,
 And the lone bee wailed as he dropped a tear;
 For the varmints gobbled his little store,
 And his wax played out and his heart was sore,
 So he winged his way to the old home band,
 And took his meals at the Helping Hand.

* * *

Alone our work is of little worth;
 Together we are the lords of the earth;
 So it's all for each and it's each for all—
 United stand, or divided fall.

We have also learned that Mr. Slocum has been circulating this poem among the beekeepers of the Northwest, where co-operation is needed.

NOTES FROM MY OWN EXPERIENCE

LOUIS H. SCHOLL

The time devoted to producing section honey was a comparatively short period of the thirty years of my beekeeping. This was due to several reasons that made section honey raising unprofitable under Texas conditions. Chief among these was the difficulty of getting it to market safely on account of the long distances it had to be shipped, to which was added the further detriment of the hot climatic conditions which made such a fragile product difficult of shipment. Only too frequently fine lots of comb honey in sections, no matter how carefully packed, would reach destination in such a broken down "mess" as to make the whole shipment one of complete ruin and worthlessness.

It was not so bad to get section honey to the market when the distance was not too great, or the weather conditions favorable, as in the cooler part of the season after the extreme summer time. But from the localities where the main surplus came from the early spring honey flows, and the major portion of the crop had to go to market as the summer season came on, the consequences were disastrous. The fact was that the bulk of the fine comb honey did come from the early spring crop in Southwest Texas at that time, especially since that section was ideally adapted to its production with its fine and abundant honey flows of fine quality honey. Also the majority of beekeepers extensively engaged in commercial honey production inhabited this section of the State at that time, thus placing the biggest part of the production farther away from the market that was to the north and east.

The writer had several occasions to see such smashed shipments of finest comb honey. The most careful packing and crating added little to prevent the damage encountered en route. Such carefully packed crates of comb honey only too often were left on the station platform, right out in the hot sun. Every beekeeper, and many others too, know how soft and tender the comb must get under such exposure. When the train arrived the agent or a husky fellow of the crew would take a truck, "jounce" it under the crates, "jerk and roll" it over the rough platform into the car and "dump" it down on the floor in a hurry to get through with it. The

hotter the day the quicker it was done in order to get out of the sun as quickly as possible. Was it a wonder then that the freight bill at the destination point had marked on it, "Reported leaking at Podunk Center," or some other transfer point along the route over which it came?

However, these were not the only reasons why section honey was not found a profitable product to produce. In many localities the honey flows were not such as to be best suited for producing this kind of honey; either due to the slowness of the flows or the quality of the honey. In other localities the swarming problem in connection with comb honey production was quite a menace, for it required crowding of the colonies to get results.

To many beekeepers it was too much trouble to "bother with so much fussing" as section honey required. There was the constant repetition of getting the supers ready each season. They had to be scraped and cleaned; and this included the section holders, slats and separators. The sections had to be folded and foundation starters put in each one of them. This part of the work was doubled when both top and bottom starters were used in order to get the desired results. Then the time must be carefully watched for when the supers could be put on the hives, and this was a problem to some, since placing them on too soon meant gnawing down of the foundation, while a delay might result in the loss of the biggest part of the crop if not an entire loss. Even after this worry over, and crop produced, there yet remained a lot more tinkering before it was ready to market. Each section had to be handled several times more, taking from the supers, scraping them, some even going so far as to sand paper and polish them, weighing and stamping the net weight on each individual one, placing in glass front cases, which must also be weighed and marked, and finally packing them carefully with straw or other suitable packing material, into the comb honey shipping crates, ready for sending to the market.

What a picnic the extracted honey producer had! No "petting" of the colonies in small hives and crowding them into the muchly divided section super at the expense of a good many pounds of honey, and an additional amount that had to be consumed in order to build the comb. All he had to do was to keep his bees in large

brood chambers, leave his extracting supers on the hives the year around, let the bees store them full at any time they were ready, harvest the crop in containers that could be safely shipped, or stored away until any future time. There was hardly any swarming problem, very little tinkering, except if the wiring and putting in foundation in any new frames might be called such, but this had to be done only once and in larger portions.

These were some of the things that caused the abandonment of section honey production in Texas and extracted honey followed almost wholly in its wake.

But it soon developed that there was a class of people among the honey consuming public that demanded comb honey, and who would not take extracted honey even at a very low price. The question had to be solved in some way, and the result was that a number of us beekeepers began producing comb honey in shallow frames, cutting this out and packing it into square cans with large openings, and filling the rest of the space up with extracted honey to make up the weight and to prevent mashing of the combs. This was called "chunk honey" at first but became known under the better name of "bulk comb honey." Under the latter name it soon received wide attention, and the advantage of producing it over section honey was so great, and so much more profitable, that it crowded the small box honey out almost entirely.

New Braunfels, Texas.

A TRIBUTE TO THE ITALIANS

J. L. NICHOLS

Having heard and read so much in praise of the Italian bee I decided to try them out. I did so, and after a few months trial I have arrived at the following conclusions. Of course, I realize that my conclusions are very authoritative (?) on account of my short experience.

But I have ascertained a few things that are real facts. One of these is that these are the worst bees to fight that I ever saw. A wild cat simply is not in it with them. Why, I would just as soon poke a hornet's nest as open a hive. I got my queens from a breeder in the coast country of Texas. He *said* they are pure bred Italians, (three band), and I suppose they are. But when I had occasion to open a hive

yesterday I decided, before I got through, that they must be a cross between his Satanic Majesty and a yellow-jacket. When I got through and got the hive finally closed up I was as knotty as a squash.

And I cannot see that they are any better workers than the blacks, if as good. Another thing: their comb, when sealed, looks as if it had been dipped in grease.

It is claimed that the Italians will remain quiet on the combs. My experience is that the only way the blacks can beat these Italians is for the blacks to be higher geared.

Grapeland, Tex.

(We are afraid that someone mailed Mr. Nichols some Cyprian or other fighting stock instead of Italians.—Editor.)

OREGON BEEKEEPERS TO MEET

H. H. SCULLEN

The annual meeting of the Oregon State Beekeepers' Association will be held at Hermiston, Oregon, December 11th and 12th, possibly continuing over into the 13th. It is the plan this year to make the annual meeting a Northwestern sent out to the leading beekeeping associations in Washington and Idaho, asking that they appoint official delegates, and urging that as many other members as possible attend this conference.

The beekeepers of Oregon have long felt, as no doubt the other beekeepers of the Northwest have, that there should be closer cooperation between the larger producing areas of Oregon, Washington, and Idaho. It is with this object in view that this conference is being called, and to encourage the associations in other states to send delegates. The Umatilla Beekeepers' Association has kindly offered to furnish free entertainment for all official delegates while at Hermiston. It is hoped that a representative of the American Honey Producers' League will be present. Several men of wide experience in marketing problems will be present at this meeting. There will also be a conference of county bee inspectors in connection with the State Association meeting. Every beekeeper in Oregon should plan to come.

Corvallis, Oregon.

Be sure to feed the bees if they need it.

Gossip With Our Neighbors

Discussed by

E. GUY LE STOURGEON

P. O. Box 1048

San Antonio, Texas

Few of us actually know what it costs to produce a pound of honey. We may never work out an intelligent marketing system until we do. Unless we know what a thing costs us we can hardly arrive at a selling price for it. In the Canadian Beekeeper for November a number of Dominion apiarists discuss the cost of producing extracted honey. Estimates vary from 8½ to 20 cents per pound!

According to the South African Beekeeper the production of honey in the Colony last year averaged 20.3 pounds per hive, and a total crop of 197,667 pounds was harvested. The American type hives have been adopted as standard and are replacing the old British hive. The box hive beekeeper is a problem there, as there are estimated to be over 4,000 non-standard hives in Cape Colony.

We are glad that Mr. Leo F. Hannegan went to the Phillipines. Why has not some enterprising American beekeeper thought of developing apiculture in these islands before? We just did not think about it. On page 166 of York's Bees and Honey he tells of his efforts and experiences. The bee was practically unknown there. Many grown men had never seen honey. The experiment will be watched with interest.

On page 567 of American Bee Journal, November, Mr. Frank Pellett observes, "Because of the failure of the honey crop in so many localities, there has been much complaint of the bees gnawing the foundation this year. Under such conditions the bees are likely to damage the sheets, and in extreme cases they will be full of holes." Experience has shown the economy of using the metal combs. When the honey flow starts they are ready for the bees to store the honey in and meantime they are not gnawed down.

"Honey production is but half the battle towards profitable beekeeping. Every advice that aids in attracting the public to the purchase of honey cannot be too welcome." So says the editor of the Bee World. He is right. The label, the container, the words we say and the things we do, all have their bearing on the business. No matter how much honey we raise, if we do not market it sanely and effectively we have failed. We must improve our marketing methods as well as our production methods to be truly successful.

The November Michigan Beekeepers Letter advises that a two weeks short course in beekeeping will be offered at the Michigan Agricultural College, Feb. 11-23, 1924. Special emphasis will be placed on the necessity for a complete knowledge of marketing conditions and facilities. This is a forward step. Marketing has become more important than mere colony manipulation. Details of the scope of the short course may be had from Mr. Ashley M. Berridge, Director, at East Lansing, Mich.

The printed biennial report of the State Inspector of Apiaries of the State of Minnesota is a fine piece of work and its circulation will do an immense amount of good. Mr. C. D. Blaker does more than merely give a lot of figures and statistics. The report is really a bulletin on the treatment and care of diseased apiaries, prevention measures, how to transfer from box hives, etc. Minnesota has a live wire bunch any way you take them.

We have talked for a long time about having a National bee law to control the interstate movement of diseased bees and honey. Will we ever have it? Do we want it, if we could get it? Beekeepers Review publishes the text of the model law proposed by the Legislative Bureau of the League, in its November issue. We had better study this matter closely and be ready to act when the time comes. We must all agree on what we want, if we want it, and when we are agreed we must act together in getting it.

Another "wonder honey plant" is discovered. Dixie Beekeeper devotes a great deal of space in November to a little annual that has been causing some commotion in Dixie. It recalls

to our mind the excitement over "Chapman's Honey Plant" and "Rocky Mountain Bee Plant," and several such much lauded flora of a generation ago. No, children, do not expect old Mother Nature to do more for us than she has already done when she gave us sweet clover, basswood, mesquite, etc.

H. C. D., on page 322 of Western Honey Bee, can answer his own question as to why the retail price of honey and sugar are so far apart when the wholesale price is so nearly the same. Every sugar cane or beet grower does not try to market his own crop and cut under the grocer's retail price like so many honey producers do. Honey can be a staple article of commerce and can be put on every retail shelf, like sugar is, when and only when honey producers recognize and protect the channels of trade.

Major A. S. Shallard, of Australia, discusses his plan of bottling honey without having a scum or froth appear on the surface, which plan he describes on page 724 of November Gleanings. When filling he holds the jar aslant by allowing the stream of honey to run against the neck of the bottle or jar in such a way that there is no scum.

The League Bulletin for November announces that special weather forecasts are available for beekeepers who are in doubt about the time to remove bees from the cellar. The Weather Bureau agrees to telegraph fair weather prospects to beekeepers. There is no charge, except the cost of the messages, for this service.

"Although the metal cover comes high, we believe that it is well worth the price and should be given to customers of Lewis Beeware who are looking at all times for first grade quality." We heartily endorse this sentence from the Beeware Bulletin. The old flat wood or Excelsior cover is a nuisance. No one should be satisfied with less than a metal cover.

Frank Pellett has visited Texas. If anyone doubts it, let him read the November American Bee Journal. Even the cover, with the winning smile of Miss Hasslbauer, tells the story, even if we did not turn to page 550 and read of ourselves as we looked to this

good friend while he was here last summer.

The fixation of color in bees is the main subject treated in the Archiv fur Bienenkunde this month. Dr. Armbruster shows that color is a matter of inheritance, rather than of environment and circumstance.

In September L'Apiculture Francaise there is a very learned article on laying workers by Mon. P. Maisonneuve in which he seems to prove that these abnormal females are in no way different from other workers. He assures us that shaking a colony to dispose of them is a useless process and certain to fail. Laying workers can fly and can find their way home as well and as safely as any other worker.

According to the Welch Beekeeper the New Zealand honey crop has been less than normal. Most New Zealand honey is gathered from the sweet clover. Their main honey flow starts about the middle of December or Jan. 1st. and prospects are good for a normal season this winter, (or do they call it "summer" now?)

In York's Bees and Honey for November, "Subscriber" on page 173 says, "I don't think some honey producers treat the storekeepers right. They (the beekeepers) sell as much as they can to the stores, and then peddle to consumers at the same price they sold to the local stores." Not much can be added to this. It is true. Everybody seems to realize it except A. F. Mead, and enough more like him to demoralize the honey market every year.

In Dixie Beekeeper for November our old friend W. E. Joor jumps all over J. E. Sutton and his defense of the black bee. He makes out a strong case in favor of what we all are agreed on, viz, that the Italian is much the better apiary bee, but we are afraid that the main question raised by Mr. Sutton is overlooked. Is the black bee dominant? Has it a prepotency in nature? That is the thing we started in to discuss. We will all agree with Mr. Joor that for *man's* use the Italian is far the better bee.

Some day we may all be gathering our propolis and making of it an article of commerce. L'Abielle of Quebec, page 107, says that in Catholic countries it is very strongly in demand for use as incense in churches. The market has never been sufficiently supplied.

Texas Honey Producers Ass'n

Notes by

E. G. LESTOURGEON, Manager

P. O. Box 1048

San Antonio, Texas

WHAT NOVEMBER SHOULD SHOW

November is the end of our bee year in Texas. We can now look back and see our mistakes and prepare to avoid them again. The closing season has been a very poor one. Very little or no surplus honey has been made. Empty hives are stacked up in nearly every apiary. We should now clean these up and begin to get ready to fill them again with spring increase. The honey plants are in excellent condition. A good season is in the ground. Prospects could scarcely be more rosy.

Be Sure and Renew Your Subscription

A reading beekeeper is a good beekeeper. Now, more than ever you should resolve to keep abreast of beekeeping thought. The time to renew your magazine subscription has come. Be sure and send your renewal through the Association. We club The Beekeepers Item and American Bee Journal together, both for \$2.00. These are the two indispensable bee papers. You cannot afford to be without either of them. Send your subscription to us. Dixie Beekeeper may be added to this club for 75 cents, or \$2.75 for all three of these magazines. Let us have your renewal subscription whether you read one or more bee journals.

What Aluminum Combs Have Done

"Find enclosed \$15.00 money order for which please send me at your earliest possibility, 30 more aluminum combs, in standard Hoffman frame size, to Martin Creek, Pa. My bees have done very well! The twelve best yielders had an average of nearly 400 pounds surplus, each, per hive. I believe that the main cause of this yield is the general use of aluminum combs in the brood chamber."—A. R. Paul, Rt. 4 Bangor, Pa.

"I have had two years experience with the aluminum combs and they have been very satisfactory. The bees take to them freely. I showed them to our State Inspector. He found

each frame as full of brood as they could be. He said that they were the most perfect frames of brood he had ever seen. They are a great advantage in extracting as they will not get out of shape."—A. L. Kleeber, Reedsburg, Wis.

"An excellent feature of the aluminum comb is that they can be put out after extracting to be cleaned up by the bees without suffering any damage from rough treatment and can afterwards be stacked without fear of moth. These qualities make them attractive to every producer of extracted honey."—John Protheroe, Rustburg, Va.

"I believe the aluminum combs will be a grand success in this section as they become more universally known."—Wm. J. Shaffer, Waverly, N. Y.

The above are a few sample extracts from letters received last month. As these combs are becoming better known their use is increasing. One man says they paid their cost, in actual cash, during one honey flow. He supplied 20 colonies with aluminum combs and 20 colonies with full sheets, in the same apiary. The average production of the 20 colonies on aluminum comes was 28 pounds of honey more than the other 20 colonies. Be sure and get some aluminum combs next spring when you make up your bee supply order.

Many Uses for Para

Do not let your combs be destroyed. A few ounces of para, if the stack is made anywhere near air-tight and the gas confined, will save many a comb. Para also has many other uses. We have a lot of reports of the successful cleaning out of ant nests and other vermin. Field seed can be saved from weevil by its use.

Arthur Sternberg of Lockhart, recently sent in an order for some more, and said, "Several years ago we tried some of this to keep weevil out of the corn in our crib. It not only kept the weevils out but the rats had to move also." This is a new use that never had occurred to us. Use a little in hiding places under your barn and report the results to us.

Exclusive Beeware Features

Do you ever realize the many exclusive features that come to you in Lewis Beeware? The new slotted bottom bar is one of these that cannot be emphasized enough. By its use, with the new wired non-sag Dadant Foundation, perfect combs can be made that extend

from top bar to bottom bar. One of our members was lately here and said that the perfect combs he was now getting increased the brood rearing capacity of his 8 frame hive to equivalent of a normal 10 frame hive.

Another Beeware feature sold by every dealer is the aluminum honey comb. These provide quick storage space during a sudden or heavy honey flow and every cell is a perfect worker cell when used in the brood nest.

The Lewis-Markel power extractor is a mechanical excellence. Every drop of honey is extracted without stopping the machine. The reversing principal works automatically.

Every purchaser of Lewis gets a free subscription to *Beecause* magazine which is mailed four times a year and is replete with timely beekeeping information.

The automatic end spacing staple now packed in beeware packages saves the time and annoyance we have always had in the use of the old spacing block or the less satisfactory "guesswork."

We could go on for a page discussing points of excellence in Lewis Beeware and Beeware Service. Most of our members, however, are users of Beeware and we are only emphasizing some of the newer features now.

In this connection, though, we want to again suggest the trial of a few packs of Modified Dadant Hives next year.

SOME EAST TEXAS HONEY PLANTS

FARMER F. SHAW

I am sending you some dates of certain honey plants, also the amount of surplus we East Texas beekeepers can expect from them in an average season.

As a rule every beekeeper tries to work out a plan or "salvation" for himself as the best way to get the largest crop from the early flows, for they are generally of the best grade of honey. My plan is to begin feeding early regardless of the amount of honey the colony may have. This rushes brood rearing, gets new nurse bees during the first light flows, and then when the heavy or main flow comes my hives are boiling over with young field bees.

The following is a list of the main honey plants and their blooming period, color of honey and the average yield:

Huckleberry, March 25 to April 15. Light

Prickley Ash, April 1 to May 1. Amber. 10 to 20 lbs.

Rattan, April 20 to May 1. Amber. 10 to 25 lbs.

Lin or Basswood, May 8 to May 24. Cream to White. 20 to 100 lbs.

Cow Itch, June 6 to July 10. Amber. 5 to 30 lbs.

Cotton, July 4 to Aug. 4. Cream. 5 to 25 lbs.

I have kept tab on these honey plants for the last three years. They may vary from five to ten days, according to the weather, from the dates given.

I do my very best to have my hives ready for these early flows each season, and have found that it pays a beekeeper to know his honey plants and when to expect them to bloom, as well as the amount of surplus that may be obtained under certain conditions.

Lovelady, Texas.

REPORTS A SUCCESSFUL EXHIBIT

T. B. CANTRELL

Our county fair, which closed on Sept. 7, was quite a success. The Beekeepers department occupied a space about 14 by 16 feet, and the space was well taken up with bees in observation hives, queens in mailing cages, (representing three races of bees,) honey in all forms except section honey, beeswax, all the most necessary appliances, bee books, booklets and journals. There were beeswax and honey displays in attractive designs.

The interest created among the would-be beekeepers was considerable. Mr. Albert M. Hunt, of Goldthwait, and myself were kept busy answering questions and explaining the uses of the different appliances. In fact the apiarian department was a decided success in every way, and I want to thank you for helping make it so.

The subscription to the *Beekeepers Item* which you gave as a premium was awarded to Mr. Clay Slone, Gatesville, Texas, you will please enter his name accordingly.

Gatesville, Texas.

In packing hives into a wagon, place them so that the combs will stand cross-wise. In a railroad car, they should stand so that the combs will be lengthwise with the car.—*Quinby.*

The Honey Crop Conditions

Conducted by

MISS A. M. HASSLBAUER

P. O. Box 1048

San Antonio, Texas

The final crop returns are all in. It has been a very poor surplus year all around. There is little to add to what was said here last month, only to emphasize that the honey flora is increasing by promising condition. The fall has been a mild one and the biennial plants are in the most ideal condition.

A few sections reported some slight fall flows but not enough to change the totals very considerably. The only states with anything like a normal 1923 honey crop were New England, New York, and the three M's, Montana, Michigan and Minnesota. In the last named state the flow was "spotted." Some areas had a wonderful flow and other sections little or none.

Bees are reported in super normal condition nearly everywhere but we are afraid that some of them are getting light in stores. It will be well to assure ourselves that there is enough honey in every hive in the apiary to carry them safely through the winter and to provide plenty for early brood rearing. When the season opens it will come with a rush and only the very best provided colonies will be able to survive a spell of bad weather in early spring.

Honey prices are firm and demand is strong. All carry-over honey will be safely disposed of before the new crop appears.

LIVERPOOL MARKET REPORT.

We have to record a busy month in October the sales of Chilean alone having been 1575 barrels at about the last rates quoted. On the other hand only 277 barrels have arrived so that this state of affairs coupled with the approach of Winter should make the prospects for Honey somewhat brighter. We quote present values as follows:

CHILIAN. Pile X 50 to 55 per cwt; Pile 1 14 to 46 per cwt; Pile 2 42 per cwt. Pile 3 35 to 36 per cwt. No Pile 30 to 32-6d per cwt.

JAMAICAN. Palih Set 45-6 to 53 per cwt; Amber 38 to 46-6d per cwt.; Liquid dark to amber 33 to 35-6d per cwt.

We quote in American currency 10½ to 11 cents per pound.

BEESWAX.—There is no change in value since the last report we made in October. We repeat the quotations then given which were as follows:

Chilian £6-15 to £7 per cwt; Jamaican £6-15 per cwt, West Afriran £4-15 per cwt.

This work out to be about 29 cents per pound.

TAYLOR & CO.

Liverpool, England

UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF MARKETS AND CROP ESTIMATES SEMI-MONTHLY REPORT

INFORMATION FROM PRODUCING AREAS
(FIRST HALF OF NOVEMBER)

CALIFORNIA POINTS:—Southern California: Only light local rains have yet fallen and considerable will be needed if spring honey crop is not to be light. Practically all the small yield is out of the producers hands. Due to large losses, many beekeepers are endeavoring to sell out, but are finding few buyers. Market steady but little honey being sold. Sales of light amber alfalfa from Imperial valley reported at 8½—8c per pound on carlot basis and of 60 lb cans extra light amber orange at 12½c per lb. Most honey being sold at retail. A little wax moving at 20c per lb., for average quality wax.

Northern California:—Weather has been favorable for late nectar flow and most colonies are going into winter quarters with ample stores to carry them through until spring. About half the honey of the spotted crop has been disposed of. The greater part of the remainder is in warehouses. Most large lots of white thistle have sold at 10 1/3 to 10½ cents per pound in 60 lb cans, and around 13 cents per pound in small pails. Country run wax has brought 21—23c per pound cash or 24 per lb. in trade.

PACIFIC NORTHWEST:—Most small lots are said to be sold up but many larger producers are holding their crops for higher prices. Already prices are higher than last years. One car light after alfalfa reported sold at 10c per lb., ton lots at the same figure, and single 60 lb cans white extracted at 12½c. Few cases of white comb sold around \$5.00 per case but comb honey is getting well cleaned up.

INTER-MOUNTAIN REGION:—Soffe sections report weather so cool and cloudy that bees have been held back from excessive flights. Colorado and Utah beekeepers however, report bees have been able to fly nearly every day. Colonies generally strong for wintering. Demand good and even brisker than reported two weeks ago. Both local and outside trade reported good. Demand especially good for comb and the market is strengthening as supply is cleaning up. Honey is rapidly getting out of producers hands. Some sales being made for future delivery indicating that the buyers are anticipating higher prices. A large number of cars extracted white sweet clover and alfalfa sold at 8, 8½, 8 3/4, 9, 9½, 9½, and 10c per pound. Most carlot sales apparently made at 8½ to 9c per pound. Ton lots of white extracted have sold at 8 1/3—12c mostly around 10c per lb. Single 60 lb cans 9 1-3 to 13 1-3c mostly 12—12½ per lb. and small pails 12—15c with some wholesale lots reported low as 10c per lb. Carlots and large lots of fancy and number one white comb reported sold at \$4.75 to \$5.00 per case, No. Two and choice at \$4.00 to \$4.65, mostly around \$4.50, off grades \$3.75 per case. Beeswax quoted at 24c per pound.

ARIZONA POINTS:—Valley bees are going into winter quarters in fine shape, with plenty of stores; some bees in mountain section reported short of stores. Practically all honey is now sold, including stock held over from past season or two. Demand good but cannot be supplied account lack of honey. Recent sales, carlots and less, reported made at 6½ to 8½ cents per lb, depending on color and flavor, mostly 8—8½c. One Apiary of 430 stands reported sold for \$4,800 cash.

TEXAS POINTS:—Since the fall rains commenced bees have built up a good deal and have thus consumed winter stores heavily. Cold rain weather during the past two weeks has kept bees from working much on the fine fall aster bloom but some honey has been secured. No frost yet, but grasshoppers have destroyed many fall flowers. Crop outlook for next year unusually good. Price and demand is much better than last year and honey supplies are fast being cleaned up. Many beekeepers are already sold out. One carlot of extracted light amber honey has sold at 8c per lb., ton lots at mostly 8—11c and 60 lb. cans at 9—12½c with small pails 12—16c per lb. Bulk comb, light amber color, has moved at 16—17c per lb, in 5 and 10 pound pails.

PLAINS AREA:—Owing to mild weather bees are flying nearly every day. Honey plants in good condition for next year, Demand reported good. One carlot water white extracted in 60 lb cans sold at 10c per lb, carlot light amber at 9c and carlot white in 5 pound pails at 15c per pound.

EAST CENTRAL AND NORTH CENTRAL STATES:—The rainy fall has been very favorable for clover and other honey producing plants, and prospects for next season are good. Outdoor wintered hives are practically all packed. Demand good but the market shows a lack of stability and a wide range of prices, especially for small pails. Comb honey nearly exhausted. Carlots white clover sold at 5—10½c per pound, light amber 8—10c; ton lots white clover 9½—12c, amber 9c, 60 lb cans white 13—15c, amber 10c, small pails 15—22c per pound, wholesale low as 12c per pound. Small lots No. 1 white comb \$4.50 to \$5.00 per case, some low as \$3.50. Producers receiving 20—25c, some 28—29c per lb, for beeswax.

SOUTHEASTERN STATES:—Colonies well supplied with winter stores, and bees are forming winterclusters. Honey plants in good shape. Extracating just being finished in Florida. Crops very largely sold out, at satisfactory prices. Few sales reported from Florida of 60 lb cans light amber at 12—15c amber 10—12c per pound amber comb 6—8c, and small pails light amber at 12—15c, amber 10—12c per pound amber comb quoted from \$3 to \$5 per case.

WEST INDIES:—Porto Rico—Hill section crop about in, double that of last year, which was only quarter an average crop. Heavy rains have fallen lately. Beekeepers securing 6c per pound for amber extracted in 600 pound barrels. Cuba, large shipments have gone to Holland recently at 76c per gallon, including cost and freight.

NORTHEASTERN STATES:—Bees mostly packed for winter. Recent mild weather has permitted flying nearly every day. Quality of stores excellent. Some hives needed more feeding than had been anticipated. Recent rains have very materially improved the condition of honey plants for next year. Buckwheat is in good demand but white extracted honey is not generally moving quite so well although some beekeepers are already sold out. Comb sales heavy, Serious depleting available supply. White clover and basswood extracted have sold at 9—12c per pound in ton lots, 10—15c mostly 12—15c per pound, in 60 lb cans; buckwheat in kegs and cans quoted at 8—12c; mostly 8—9c per pound. In ton lots; at 10—13c in 60 lb cans; small pails all flavors 12—15c per lb. wholesale. Carlots No. 1 white comb have sold at \$4.50 to \$4.75 and mixed No. 1 and No. 2 buckwheat at \$4 per case; smaller lots quoted from \$4 to \$5.50 per case for clover and \$3.25 to \$4.80 for buckwheat.

TELEGRAPHIC REPORTS FROM IMPORTANT MARKETS.

Arrivals cover receipts for preceding two weeks. Prices represent sales or current quotations, as secured from the original receivers but must not be understood as attempting to forecast future market conditions or prices in any degree. Market condition comments represent the opinion of the trade, and their accuracy is not guaranteed by the Bureau of Agricultural Economics. Market reports are for Nov. 14.

BOSTON:—Since last report 200 cases N. Y., 1 car Calif. and equivalent to 1 car Hawaa 11 by boat arrived. Demand and movement slow, market about steady.

COMB:—Sales to retailers. N. Y. 24 sect. cases white clover, No. 1 \$5.75; carton stock \$6.50. ver. 24 sect. cases white clover No. 1 carton stock \$6.50, without cartons \$4.50 to \$5.50.

EXTRACTED:—Sales to confectioners and wholesale grocers per pound. Porto Rico amber 8½ to 9½c Calif. orange 14—16c. Hawaa 11 White 9—10c amber 8½ to 9½c.

CHICAGO:—Since last report 2 cars Ariz., 1 car N. Y., 1 Utah, 1 Nev., and approx. 1000 lbs Ill., 500 lb. Iowa, 1500 lb. Wis. arrived. Demand and movement good, market steady.

EXTRACTED:—Sales to bottlers and confectioners. Nev. Utah and Ariz. mixed alfalfa and clover white 11—12c,

light amber 10—11c, dark amber 9c; Ill and Wisc. white clover and basswood 12—13c.

COMB:—Sales to retailers. N. Y. Ill. Wis., and Iowa, white clover No. 1 fcy \$5 to \$5.25; No. 2 \$4 to \$4.50, No. 2 poor quality dark \$2.50 to \$3; ockwheat No. 1 fcy. \$4.00 to \$4.50.

BEE SWAX:—Receipts moderate. Demand and movement moderate, market steady. Bleachers and wholesalers paying for Nevada, Utah and Arizona light 28 to 30c; dark 25 to 27c. South American, best light 25 to 27c.

KANSAS CITY:—Since last report 1 car Colo. arrived. Supplies moderate. Demand and movement moderate, market steady. Sales to jobbers.

COMB:—24 sect. cases Colo. white alfalfa No. 1 \$5.50; fcy., \$5.75; ex. fcy. \$6.

EXTRACTED:—Per pound Colo. alfalfa water white 12c, light amber 11½.

LOS ANGELES:—**COMB:**—Supplies light. Sales to wholesalers. 24 sect. cases Nev. fcy., \$5.50 to \$6.00 Calif. Inyo County fcy \$5.50 to \$5.75.

MINNEAPOLIS:—**COMB:**—Supplies light demand and movement light, market very firm. Sales to retailers. 24 sect. cases Minn. white clover No. 1 \$6 to \$6.50.

EXTRACTED:—Supplies moderate. Demand and movement slow, market barely steady. Sales to retailers, confectioners and bakers per lb. Minn. white clover 12 to 12½c Extracted Western alfalfa and sweet clover light amber 10½ to 11c; white 12 to 13c.

NEW YORK:—Since last report 92 bbls. honey Porto Rico arrived. Domestic receipts moderate. Demand and movement moderate market steady. Sales to jobbers, wholesalers, confectioners, bakers and bottlers per pound. Inter-mountain white sweet clover 11½c to 12½c. N. Y. white clover 12 to 12½c; buckwheat 10 to 10½. Calif. white orange 15c. Porto Rico Demand moderate; movement limited; 90c per gallon.

COMBS:—24 sect. cases eastern, white clover extra fcy., \$5.75 to \$6; fcy. \$5.50; No. 1 \$5, to \$5.25; No. \$4.50 to \$4.75.

BEE SWAX:—Since last report 14 seroons San Domingo, 31 bags Argentina, 25 bags Chile, 4 boxes Cuba, 10 cases Holland arrived, demand moderate, market firm. per lb. Chile light 28—29c; Brazil light 27—28c; West Indies light 26—28c; Italy light 25—27c; Africa dark 22—23c. West Indies dark 20—22c.

PHILADELPHIA:—Since last report 8 bbls., Porto Rico arrived. No domestic receipts. Holdover supplies moderate. Demand poor, movement slow, market about steady.

EXTRACTED:—Sales to manufactureres and bakers. Porto Rico in bbls. amber 88c, light amber 90c per gallon. In cases, packed locally 10c per lb.

ST. LOUIS:—Arrivals since last report include 1 car Colo. Supplies moderate. Demand and movement moderate, market steady.

COMB:—Sales to wholesalers and jobbers. 24 sect. cases Colo. white sweet clover \$5.75.

EXTRACTEDS:—Sales direct to retailers. Western light amber alfalfa and sweet clover 10—10½c per pound.

BEE SWAX:—No arrivals reported since last report. Dealers quoting 26c per lb. to producers for ungraded country run wax.

SAN FRANCISCO:—Supplies light. Demand and movement moderate, market steady to firm. Sales to jobbers.

COMB:—Calif. and Nev. water white fcy \$5 to \$5.25; No. 1 \$5; No. 2 \$4.75 per case.

EXTRACTED:—Calif. light amber orange 11—12c, star thistle 11—12c; light amber alfalfa 9—10c. Hawa 11 water white algaroba 9½c, white 9c, light amber 8—8½c; dark amber 7—7½c.

BEE SWAX:—Calif. light 25½—26½c, dark 24—24 1/2c.

DENVER:—Demand and movement limited, market firm, few sales, prices unchanged.

COMB:—Sales to retail trade. Colo. 24 sect. cases white alfalfa and sweet clover choice \$5.60; ot grade \$5 per case.

H. C. TAYLOR,
Chief of Bureau.

Washington, D. C.

THE BEEKEEPERS ITEM

A SMALL ITEM IN ITSELF, A BIG ITEM FOR BEEKEEPERS.

Entered in the Postoffice at New Braunfels, Texas, as Second-Class Matter.

Louis H. Scholl, Editor.

One Dollar Per Year

VOLUME 7

NEW BRAUNFELS, TEXAS, DECEMBER, 1923

NUMBER 12

Better Knowledge of Breeding Necessary

The Art of Queen Rearing is Well Developed, But the Science of Bee Breeding is In Its Infancy, and We Can Not Compare Results with Those Obtained By Breeders of Other Animals Until We Know More About It.

C. C. Stone

AFTER SO MUCH discussion of the relative potency of black and Italian bees, and the dominance of certain characteristics, it is gratifying to have the editor's statement on page 240, that careful experimental investigation is to be made. Unfortunately the results of such studies in the past have not been published in popular form. There has been no popular demand. That such study has been little, or it's results meager, may be inferred from another statement in the same paragraph, i. e. "No definite conclusion can be arrived at except by scientific study and investigation."

The art of queen rearing is well developed, but the science of bee breeding is in its infancy. We can not compare results with those obtained by breeders of other animals until we understand definitely the method of segregation of unit characters where parthenogenesis is a factor in such segregation. The facts that in hybridization there are no F. drones and that we can not mate mixed dominants by the ordinary methods of other breeders, make it imperative that we learn more about the mechanics of reproduction. With a better understanding of the reduction processes of the reproductive cells of both male and female we might hope to make experimental breeding show us the true behavior of color or other characters in heredity. With our limited knowledge of such behavior any discussion of potency must necessarily be far from decisive.

The science of genetics has only recently been brought to a state that renders it applicable in a definite and decisive manner to bee breeding. I suppose this is why our naturalists edit-

ors have given us so little from their stores of information. Another reason may be that breeders have not manifested any great interest. Again, our journals could not devote very much space to the interest of specialists. They are and must ever be a power for developing and sustaining general apicultural interest, but with the growing usefulness of our schools in imparting fundamental knowledge the press may be able to give somewhat more of its attention to technical subjects.

With trained scientists, armed with proper facilities, attacking our problems, we may confidently hope to see breeding methods rapidly improved. Phenotypic selection is at present our best tool, but in our ignorance we use it awkwardly. We shall learn to use it more directly and more positively. We shall continue to select drones indirectly—through the queens, but our selection will be made with greater certainty.

To turn to something concrete and present: Mr. Brenner's plan of having the best queens rear drones is certainly fundamentally sound. If breeders do not use some similar plan it would be interesting to hear how they choose drones. My way, or, rather, the way I use, is to rear queens from those best queens, then with all colonies near the mating yard headed by these daughter queens let them rear drones. The finest thing that Mr. Brenner and other breeders have done is to exemplify the beekeeper's traditional unselfishness by publishing the facts learned and methods devised. While men breed bees, may beekeeping continue to breed that type of men!

Cunningham, Texas.

THE OLD MASTERS IN BEEKEEPING

W. E. JOOR

We pat ourselves on the back and congratulate each other that beekeeping in the United States is far advanced and still progressing, and much of it is so. But let us candidly examine the situation in this country, and ask ourselves some honest searching questions, as for instance, "What was the condition of beekeeping prior to 1850 as compared to now? Who were the great masters who wrought this remarkable change since that time into effect? What were their guiding motives? Are those motives still guiding the industry?"

The men who led the beekeeping multitude out of Egyptian darkness since that time have practically all passed away. There were Langstroth, Quinby, the senior Dadant, A. I. Root, Doolittle, Alexander, C. C. Miller, and others. These men were enthralled with love for the honey bee and its wonders, and their great practical discoveries were incidental with their searching for its peculiar characteristics.

Each of these stood out prominently as a pillar of wisdom and knowledge, great as leaders in their day, respected and looked up to by the masses as sources from which real, authentic information came and in whom confidence could be bestowed.

Have we now a Joshua on whom their mantel may fall, one to speak with authority and lead the groping hosts through the desert of commercialism that threatens to engulf the wandering faithful?

These old leaders were like Columbus who discovered the new world, and like De Soto and La Salle and others who discovered the great characteristics of the new land. They each had, during their life journey, opportunity to likewise discover in a new apicultural field the great fundamental and practical things that were possible during that time. Our new leaders will have greater difficulty in searching out as it were, the sources of the rivers, the passes across the plains and mountains, etc; but the leaders are still needed. Who is able to wear the mantel of those old leaders and take up the burdens where they laid them down when they were called home?

Dallas, Texas.

Everything ready for the season, is it?

A GROUP OF NOTABLE BEEKEEPERS

ALMA M. HASSLBAUER

The group picture that accompanies this article, was taken at one of the most notable meetings of the leaders in the movement for better beekeeping methods that has been held in many months. The meeting was held during September at Hotel Majestic, on the shores of beautiful Lake Labelle, Oconomowoc, Wisconsin. The persons who attended the meeting did not call themselves by this name, but they could well be called "The Committee on Standardization of Equipment and Methods for American Beekeeping." In a sense they were a self appointed committee, but in a larger sense they were selected for the duty by the beekeepers of the country. These are the men and women, from every part of the Republic, who are the most successful merchants in beekeeping appliances, and it is their aim and object to simplify and standardize the hives and furniture that go toward making modern apiculture possible. They also interested themselves in the problems of marketing honey and adopted as the slogan of the meeting, before it adjourned, "Eat More Bread and Honey During 1924." They rightly believe that if our consuming public could be taught the value of honey as a spread for bread, our children's health would be much better and our dentist bills would be much lighter.

Let us mention a few notables in beekeeping who are in the picture. There is our old friend Frank Rauchfuss, who has done more than any other one man for the idea of cooperative marketing of honey. He and his work stand as a guide post and a beacon light to the harrassed producer who is struggling toward saner and better sales methods. Frank Rauchfuss is a name that stands for the idea and the ideal of unselfish service. No one has given more of *himself* than has this wonderful man.

Lou Parks is there, and, standing in the rear row, we see his sweet faced mother. It was fifty years ago that her husband, Lou's father, invented the V-grooved section and made possible the production of section comb honey. Before that time the self folding section we know today was undreamed of. He and G. B. Lewis began their manufacture on a large scale, and

the great Lewis supply factory had its beginning then.

In the picture one sees George C. Lewis who is now the head of this firm and who, with Parks, still carry on the business of their fathers. Kenneth Hawkins, too, is here. Since the picture was taken little Paul has come to the Hawkins household and the crown of fatherhood has been placed upon the head of our friend. Kenneth has but one thought. It is for the bees. "Have you done the best possible for your bees, today?" is his constant question.

Pennsylvania sends C. C. Brinton to this conference. Brinton knows the beekeeping of

guidance and assistance and advice. Someone said that beekeepers were lovable folk because the very nature of their business makes them sweet and gentle. I fancy that the patient gentleness and sweetness of B. F. Smith was innate with him. It must always have been an apparent and outstanding characteristic of this big up-standing western gentleman.

The old south sends, from Virginia, John Protheroe to the conference. John has grown up in the supply business. He would not be satisfied with inferior goods and changed his stock until he got the best that he could find to offer the beekeepers of the Patomac. Quality is his slogan. Bees deserve the best that we can



Prominent Figures in Beekeeping Who Met to Study Bees, Supplies and Marketing

the "Quaker State" from border to border, and his growing business of supplying its wants give evidence that the beekeepers there know him as well and realize his sterling straight-shooting character. To show one reason for his success and to give a picture of the man himself I am going to quote one thing he said at the meeting. "I endeavor to give every order my prompt and personal attention, and a 24 hour shipping service."

Some years great floods of the whitest clover honey come to the beekeepers of Montana. Every season the irrigated area spreads out and new apiaries are established. To B. F. Smith, of Fromberg, the apiarist turns for

give them and will well repay the slight increase of cost.

Two of the Dadant boys are there, Louis C. and Maurice G. Dadant. "Purity of Product, Our Aim and Our Pride," this is the Dadant family motto. Only the best and cleanest and purest beewax can enter the door of their factory. No substitutes or adulterations will be tolerated by them. Is it any wonder that over 160,000 names are on their mailing list and that their name and reputation is known in every hamlet of America?

Where Iowa and the Dakotas smile at one another across the "Big Muddy" stands Sioux City, and to the beekeepers of that section the

names of W. P. Southworth and the Western Honey Producers are synonyms. Prompt and courteous service, quality supreme, a liberal and iron-clad guarantee, and fairness of dealing are the four corner-stones upon which his business is founded. When Southworth has decided on a standard hive or the worth of an appliance, the word has been spoken, and the growth of his business shows that he has made very few or no mistakes.

E. W. Atkins—where can we say he is from? He is there. "Tommie" Atkins, as we all love to call him, was born in England, educated in Canada, and is well and personally known in every beekeeping state of the Union. He served as extension specialist in Guelph, Ont., Canada. He has held short courses and practical and experimental apiary demonstrations in nearly every county of Iowa. He has traveled from state to state doing extension work and delivering lectures at countless association meetings for many years. In Texas we know him and love him and have felt that our meetings at College Station are better and more interesting when "Tommie" visits us. Good hives and good beekeeping practice is his hobby. He is one of our strongest workers for real standardization.

The beekeepers of Michigan know A. G. Woodman. The smudge pot and the roll of burning rags our fathers had to use have been forgotten by a generation that looks to "Bert" and his factory at Grand Rapids for thousands upon thousands of bellows smokers. Emerson said that if one should make a mouse-trap a little better than another, the world would beat a pathway to his door. So has the beekeeping world beaten a pathway to the home of A. G. Woodman.

Space will not permit me to mention, as they should be mentioned, all the great men and women of the bee supply world who met at Lake Labelle. They all are looking at you from the picture. There is Joe J. Lange, of Wisconsin; M. J. Molloy, of Minnesota; Joe H. Bohl, of Washington; J. C. Fraser, of Tennessee; S. J. Friedman, of Kansas; J. F. Macdonal, of South Carolina, and others. All are actuated by one central thought: "Quality of beekeeping equipment; honesty of dealing; service to the beekeeper." It is no wonder that these men prosper. It is no wonder, that with them devoting themselves to its needs, beekeeping in America progresses with leaps and bounds

and that foreign lands are adopting American standards as the standard of the world.

San Antonio, Texas.

CAUSES AND CONTROL OF SWARMING

LE ROY DAVIS

There is much written about the cause and control of swarming and I want to explain in a few words how I understand it.

A colony of bees consists of a mother bee, workers and drones. Each is different in construction. Each has different duties to perform. The function of the mother bee is to reproduce the species. The workers are females, although sterile, and they have many functions. They provide food; that is one function, and in this performance they are mainly guided by instinct. And they defend their hive by instinct. Yes, they are females and they reproduce—their function is colony reproduction. So then, swarming is one of their functions, and in the performance of it they are guided by instinct.

Now we may control the functioning of this instinct, because we know some of the circumstances that intensify it, and some of the circumstances under which it subsides; or we may function for them, by making artificial increase. Circumstances do not change the instinct so readily, but instinct itself can be changed by heredity, and heredity can be greatly assisted by environment.

By environment we may hold this instinct inactive by anticipating anything that would tend to arouse it; such as crowded condition, etc. By holding this instinct inactive by anticipating everything that might arouse it, or function for them, it would become like your arm if left hanging limply at your side. You would lose the use of it. It would finally fail to function. So by environment the bees adapt themselves to their surrounding until it becomes a lost art, and fixed by force of habit and by heredity it is carried into the blood and established by selective breeding. It was those two principles perhaps that rendered subterranean fish not only sightless but eyeless. The environment of perpetual darkness held the eyes inactive until heredity removed the eyes.

We notice another phase which seems to be equally important. It is brought about by the relation that the swarming instinct bears to the storing instinct. Those two instincts are

nearly opposite. The storing instinct is more constant while the swarming instinct is erratic and changeable. While one is stronger the other is weaker and vice versa. Being opposite, or at least so unlike, they do not function simultaneously with any degree of force. So then it remains that while a more powerful storing instinct is being developed the swarming instinct is being crowded out automatically.

Now, while this will take time, it is the only way I know to permanently decrease swarming, and my contentions are, (as much as I would emphasize the importance of pure stock,) that proper management and proper environments are in a way of as much importance as breeding. It is physically true in queen raising for a queen of splendid parentage may be rendered almost worthless by improper management or improper environment.

Nixon, Texas.

WHERE IT IS SUMMER NOW

JOHN UNSWORTH

The indications are for a very good season for the bees here in New Zealand this coming season.

Today is October 13th and it is spring time here in New Zealand. The bees today were working very freely on the apple trees which are now almost all in full bloom. The dandelion is blooming in the paddocks or fields, and bees are very busy gathering pollen and honey from them. The white clover, which is the chief honey producing plant in New Zealand, is now coming into flower everywhere; the first blooms I observed were seen during the second week of September. The bees are very freely patronising the bloom on the gooseberry bushes, where they may be seen working from daybreak to long after sunset. They work on the gooseberry bushes as long as they can see at all.

November is the general swarming month throughout New Zealand, which, with me, is usually about the middle of the month. In my locality the main honey flow starts about the middle of November and lasts till about the middle of January. From the middle of January till the middle of February the bees gather little more than what they need for the daily requirements of the colony. Brood rearing ceases here in March and does not commence again till about the last week in July. An examination of

the hives during the last week of August, which is the time the bees get their first spring overhauling here, should reveal brood rearing in several frames with a little emerging brood.

The Langstroth hive is the hive that is used universally throughout this country. Outapiaries are very much in vogue in this country. Migratory beekeeping, such as practiced in America, is impracticable in New Zealand as the main honey flow starts almost simultaneously throughout the Dominion, therefore the beekeepers go in for outapiaries.

Ngongotaha, New Zealand.

A LOST OPPORTUNITY.

B. A. HADSELL

We hear very little from our largest honey producers. I will give a little of my experience. I was farming my 160 acres, running my 250 head of cattle and 1,700 colonies of bees, with a shortage of help and about a carload of honey on the hives. A hired man ran the head of the irrigating water in the day time, and I ran it at night, and we worked with the bees by day.

When we were extracting I was trying to get the honey to the extractor as fast as possible. I came to a hive rigged up high, filled from bottom to top, very strong and quiet. I loaded up my wheel barrow from the one hive and I noticed a lot of dead bees on the excluder. The first thought was, I might have previously put a comb of brood above the excluder but a glance in front showed an opening to the lower super above the excluder, so they could have passed out. My curiosity was aroused, I lifted the super, took off the excluder, giving it a thump on the hive to knock the dead bees off, but was astonished to find they were all worker bees that were so large that they became fastened in trying to get through. I had never seen so much honey from a single colony, and so gentle bees or so large before nor since. Just then some one in the extracting wagon called for more honey. I rushed the honey in and kept rushing, postponing investigation until a more convenient time.

After the rush I thought I would photograph the dead bees stuck in the excluder and measure the tongues and the stings, and move this colony of giant bees several miles from other bees and commence raising queens from them and let the world know what I had. But alas,

my valuable queen had died before I could do so, leaving no brood. I had missed the golden opportunity of my life.

Now the question naturally arises in the minds of the readers where did I get such a valuable queen? I must frankly admit that I do not know. I had bought several yards of highly bred-up bees, also been sending away for long tongue Goldens, Three Banded, and Carniolans. I got two dozen queens shipped from a southern breeder. They were bright golden, larger than any I had, yet they could go through the excluder. They were great honey gatherers but very cross. I then got five dozen from Ohio, evidently pure Italians, and about the same number from Kentucky, and one and one-half dozen from Benton, at Washington, D. C., who was experimenting with many races from other parts of the world. I bred up from the best honey gatherers and gentlest colonies after a trial.

Buckeye, Arizona.

APICULTURE IN NORTH MANCHURIA

Consul G. C. HANSON, Hardin, China

(Credit for the report to be given T. Leonard Lilliestrom)

Within the past two years an increasing interest has been shown in North Manchuria in the rearing of bees and in the early spring of 1922 there was organized at Harbin the Apiculture Section of the North Manchurian Agricultural Society. This organization maintains at Harbin a retail store for the sale of honey and equipment required for the industry. The members of the organization are all employees of the Chinese Eastern Railway, who devote their spare time to gardening and apiculture. The society is now looking for connections with a view to establishing an export trade of honey and wax, and to the importation of the necessary equipment for its members.

Origin of Local Apiculture. When the Ussuri country first was populated by Russians, the Russian Government realized the possibility of bee culture being conducted there on a large scale. Inasmuch as then there were no railroads, and the difficulty of the people in establishing the industry was appreciated, the Government offered special cash premiums for every live colony of bees brought into the country. The early settlers were largely Little Russians from

Ukrania, and the local bees are therefore, known as "Ukrainian". Honey of high quality was produced, and the prospering industry soon spread from Ussuri into Manchuria, where it also found satisfactory conditions.

Districts and Sources of Honey. The attention of bee culturists was early drawn to the enormous forest districts of the eastern line of the Chinese Eastern Railway. Sixty percent of the trees here consist of honey producing species, such as apple, pear, plum, apricot, maple, velvet tree and linden-tree.

The industry began to extend from Harbin to the east and from Pograniohnaia to the West. Within a short period of the entire line from Harbin to Pograniohnaia was covered with separate colonies of varying size. Development is now noticed in a southerly direction where there are large forests of nut trees, and toward the western line of the Railway in the foothills of the Kingham mountains.

Number of Hives. Statistical data on the bee industry are extremely poor, and it is impossible to ascertain the total quantity of hives in the districts; but a minimum of from 8,000 to 10,000 colonies is estimated in the Chinese Eastern Railway Zone.

Quantity of honey Gathered. An average of from 40 to 120 pounds of honey is gathered yearly from every hive, depending upon the locality. There are instances known where in particularly favorable years separate colonies have produced as much as 280 pounds of honey each. Figuring the average production of honey per hive as 80 pounds, and the total of hives as 7,000, we arrive at a minimum annual production of 56,000 pounds of honey.

Kinds of Honey. In view of the great variety of honey produced in the district it is not possible to speak of any definite kind of honey, but a general classification would include in the spring—white, fruit honey apple and pear; in the beginning of the summer—yellow, maple honey; in the middle of the summer—white lindentree, and this constitutes 50-60% of the entire quantity; in the autumn dark, flower honey (on the southern line—nuts.)

System of Hives. Frame hives of Dadan-Blatt in twelve and Dadan-Quinby in ten frames are those in greatest local favor. A satisfactory recent change has been that effected by many apiculturists who have installed hives in 16-18 frames of the above system.

Characteristics of Local Bees. The North Manchurian bees are large in size, industrious, remarkable peace loving and immune to disease. No disease of any kind has been reported among the Ukrainian bees in Ussuri or Manchuria since the time of their transportation.

Prices of Honey and Bees, and the Disposal of the Product. Prices are not firm and vary greatly because of local reasons. Within the past three years prices exgodown Harbin have fallen for honey from \$12-15 Mex. per food of 36 pounds to \$8-12 Mex; and for bees from \$1.50 per pound to \$1.00 (The Mexican Dollar is worth approx. 50 U. S. cents.) It is believed that prices will continue to go down. Practically the entire output is consumed locally, only 30% being exported to Chinese ports further south.

Chinese as Apiculturists. The special odor emanating from the Chinese, and their use of onions and garlic, are very abhorrent to bees, with the result that the Chinese have conceived the idea that "bees do not love the Chinese." Lack of specialized knowledge is also an obstacle to Chinese engaging in the industry. At the present time only from ten to fifteen Chinese in the district are known to own a few hives each; the other beekeepers are Russians. Chinese activity in this connection is almost entirely limited to seeking in the autumn woods for honey in hollow tree trunks and crevices in the rocks, where the bees are then smoked out and the honey and wax gathered. The quality of the product so gathered is very low.—Secured through Bureau of Foreign and Domestic Commerce.

Washington, D. C.

EXTRACT DIFFERENT HONEY SEPARATELY

M. C. TANQUARY

If there are two or more distinct nectar flows during the season yielding different grades of honey, the extracting should be timed so that the different grades may be kept separate. This is particularly true if there are any dark or bitter or otherwise objectionable honeys produced; such as that from bitterweed, broom weed, snow-on-the-mountains, etc. The honey from the above mentioned plants may be most profitably used as food for the bees, provided, of course, that it has come from disease-free colonies.

Throughout the spring and summer plenty of room should be given to the queen for laying and to the bees for storing honey. A constant lookout should be kept for poor queens and whenever found they should be replaced with good ones. Whenever the colonies are examined the condition of the brood should be noted and if there is any dead or unhealthy brood for which the beekeeper cannot determine the cause, a sample should be cut out and sent in a carefully wrapped box to the office of the State Entomologist, College Station, Texas, for examination.

College Station, Texas.

CENTRAL TEXAS COMES TO FRONT

JOHN R. HANCOCK

The Dallas County Beekeepers Association held a field meeting at Dalworth, midway between Dallas and Fort Worth, Texas this summer. The meeting was very enthusiastic from start to finish, and the beekeepers of Dalworth locality entertained the visiting members and friends in a very hospitable manner. Several ladies were present and they enjoyed the meeting very much, declaring that they will never be without bees or honey as long as they lived.

A special feature of the meeting was exceedingly interesting to everyone, and that was viewing the activities of the queen, and the workers, and movements of the drones, through a magnifying glass. This gave so much pleasure and information that even those who were best posted, felt that they had learned something new; while to the rest of the meeting, it was quite a revelation of the industry and the marvelous diligence of these wonderful friends of man, which pay such rich rewards to all who love them. On comparing notes with each other, it was found that the Dallas County beekeepers are very fast eliminating the black bees and replacing them entirely with fine Italian stock, which will raise the quality and output of honey in a marked degree; and, together with better equipment which they are all putting in as fast as possible, the business of beekeeping in this county bids fair to become a big thing and one of the most satisfactory money making lines in the great and grand State of Texas.

Dallas, Texas.

The Beekeepers' Item

A Small Item in Itself, a Big Item for Beekeepers.

LOUIS H. SCHOLLEditor and Publisher

Published Monthly.

Subscription Price\$1.00 the Year

Entered as second-class matter Dec. 13, 1916, at the Postoffice at New Braunfels, Texas, under the Act of March 3, 1879.

CHANGE OF ADDRESS: When a change of address is ordered, both the new and old must be given. The notice should be sent as promptly as possible before the change is to take effect.

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ADVERTISING RATES: These will be furnished upon application.

The season has been a peculiar one so far this winter. It has been unusually open, and the heavy rain-fall reported last month, has continued almost unceasingly in the biggest portion of the Southwest. Farther North there has been considerable snow. Reports from many sources are that the roads are so bad that it has not been possible to visit outapiaries and give the bees needed attention. In numerous instances the bees were not yet gotten in shape for winter, and some report that their bees were in fine condition early in the fall for winter but that now, owing to the prevailing warm weather and continued brood rearing, it became necessary to feed. One fortunate point in the beekeepers favor, however, is that whatever may have to be done, he is dealing with a lot of late hatched bees that can stand much more than old, nearly worn out adults. But be sure to feed where necessary for it will pay to do so.

We have received, through the courtesy of Dr. E. F. Phillips, apiculturist of the Division of Bee Culture, of the U. S. Dept. of Agriculture, a copy of Department Circular No. 287, entitled "The Occurrence of Diseases of Adult Bees, II" which has just appeared. This circular gives the information available regarding the distribution of the Isle of Wight disease throughout the world, and these facts served as a basis

for the regulations promulgated some time ago for the importation of adult honey bees. This information will, therefore, be of interest to those who are concerned with this problem. Copies may be obtained, so long as the supply lasts, from the Department on request without cost. When this supply is exhausted copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at five cents per copy. Attention may also be called to the fact that the Department still has some copies of the first circular with this title, namely Department Circular No. 218, for free distribution. The former circular outlines the situation up to the time of publication, March 1922, and the second circular supplements the first.

SHIP CARLOAD OF MISTLETOE

Mistletoe is a parasite on many of our hardwood trees in the South, and early in spring bees gather considerable pollen and some honey from it. In the editor's locality bees have begun to work on it as early as December if the winter is at all open, and there are warm days.

Mistletoe is used much for Christmas decorating, and it is shipped north for that purpose. Mrs. J. W. Reid of Uvalde, Texas, shipped out a car load of mistletoe to Philadelphia. The car contained 7,000 pounds, consisting of crates that averaged about 40 pounds net weight. Mrs. Reid has a brother at Philadelphia to whom the shipment was consigned and he and a number of the people of that city distribute the mistletoe for Christmas decorations. The shipment was secured in the immediate neighborhood of Uvalde and the men and boys who gathered it were delayed considerably on account of the wet weather. This parasite plant grows principally on the mesquite trees in that section, being so thick on some that it practically kills the trees. What is so common there is prized very much and is very valuable in the northern country during the holiday season.

Word has reached us from Dr. E. F. Phillips, that Dr. A. P. Surtevant returned on December 4th to resume his work on bee diseases of the Bee Culture Laboratory, at Washington, D. C.

Examine all your colonies the first possible opportunity you have as they may be short of stores.

HONEY YIELDS BELOW AVERAGE

The average yield of surplus honey in the United States this year is only 39.1 pounds per colony according to reports received by the United States Department of Agriculture from its special honey and honey bee correspondents. In 1922 the average yield per colony was 53.8 pounds and during the period 1913-1921 the average per colony. The reports of the correspondents also indicate that only 27.9 per cent of the honey taken off the hives will be shipped out of the communities in which it was produced. Ordinarily about 32 per cent of the crop is sold to outside markets.

A few important states, including New York, Pennsylvania, Michigan, Wisconsin, Tennessee, and North Carolina have an average yield per colony or better, but in most states the surplus honey yield per colony is somewhat less than the average. Comparatively little surplus was produced this year in many parts of the Ohio Valley and the Lower Missouri Valley and but little in most of the Cotton Belt. Unusually low yields were the rule in Texas and in Southern California, the flow from sage and other desert plants in the latter State being nearly a complete failure. The honey crop from orange bloom in California was also very short.

The slow recuperation of many colonies from the weakness due to the severe winter of 1922-23 prevented their taking full advantage of the flow, even when present.

There seems to be a tendency to leave more winter stores on the hives than usual and bees are generally going into winter quarters in fair condition, although conditions are somewhat below usual in the Southeast and in Southern California. In the Cotton Belt considerable loss of bees has been experienced from the poisoning of cotton to combat the boll weevil.

Prices as reported by this list of correspondents for sales in small packages, vary considerably. The average reported price of white comb honey ranges from less than 20 cents per pound in New Mexico and Texas to nearly 40 cents in New England, the average for the United States being 25.9 cents. Average prices for white extracted range from 11 or 12 cents in Utah and Idaho to 32 cents in New England, the average for the United States being 19.2 cents. The United States average price as reported in November, 1922 was 21.0 cents per pound for

white comb honey and 14.3 cents per pound for white extracted.

About 60% of this year's extracted compared with an average of 51%; while only 30% is comb, compared with an average of 35%. The percentage of chunk or bulk honey is nearly 10% which is 4% less than the 5-year average.

NATIONAL BEE LAW PROPOSED

S. B. FRACKER

The Bureau of Legislation of the American Honey Producers' League at both the last two annual conventions has recommended the enactment by Congress of regulations governing the interstate movement of bees and used bee supplies.

It is understood that the United States Department of Agriculture will not push such a measure but opposition on their part is not anticipated if the beekeepers demand action. State laws are unsatisfactory and the present postal regulations are nearly valueless for the purpose of preventing the spread of disease.

The original draft of a bill to be presented to Congress contained regulations regarding the importation of bees but these are now unnecessary as the so-called "Isle of Wight disease bill" covered that subject. Omitting this part of the bill, it, in a word, prohibits the transportation from one state to another of bees or used bee supplies without an inspection certificate from the proper state official. The secretary of agriculture is authorized to arrange for inspections by federal men when necessary, as a few states have no inspection service. The administration would be in the hands of a board of three competent members of the department staff, serving without additional compensation, and would therefore be unbiased and non-political.

The committee, now consisting of Colin P. Campbell, Grand Rapids, Mich., chairman; Kenneth Hawkins, Watertown, Wis., and D. H. Hillman, Salt Lake City, Utah, wishes to hear from beekeepers and breeders everywhere regarding this proposal. It is important that all who either actively approve or disapprove such a national law, or object to part or all of the suggested bill, write soon to the chairman of the committee.

The draft of the proposed bill, which the

St. Louis convention directed to be printed in the Bulletin follows:

A BILL TO REGULATE THE INTERSTATE TRANSPORTATION OF HONEYBEES AND USED APIARY EQUIPMENT, TO PREVENT AND RETARD THE DISSEMINATION OF DISEASES OF HONEYBEES, AND FOR OTHER PURPOSES.

BE IT ENACTED by the Senate and House of Representatives of the United States of America in Congress assembled.

Sec. 1. That no person shall ship, transport, offer for shipment, or deliver from one state or territory or district of the United States into any other state or territory or district, any honeybees or used apiary equipment unless the apiary or establishment are moved has been inspected in advance within such a period of time as the Secretary of Agriculture shall prescribe by the proper qualified official of the state or territory or district of the United States or by a qualified inspector of the Department of Agriculture, and found free from contagious or infectious diseases of honeybees, or until such used apiary equipment has been sterilized under the direction of such inspector or official and a certificate showing such inspection or sterilization has been granted to the shipper. That the shipper shall attach such valid certificate of inspection or sterilization to every package, box, crate, or bundle containing bees or used apiary equipment and shall send in advance of shipment a certified copy of such certificate to the Secretary of Agriculture or to the proper state, territorial, or district official of the state, territory, or district to which the bees or equipment are destined, or to both, as the Secretary of Agriculture may prescribe. That no person shall accept for shipment, transport, or deliver, any bees or used apiary equipment from one state, territory, or district of the United States to another state, territory, or district unless the aforesaid certificate is attached to the outside of each package, box, crate, or bundle containing the same.

Sec. 2. That for the purpose of this act the term "used apiary equipment" shall include all hives, frames, comb, and all other appliances and materials which are or have been used in apiculture or in the production or handling of honey, but shall not include beeswax, comb honey, or extracted honey, intended for use as human food or in the arts; and that the term "honeybee" shall include any stage of any bees which are or might be domesticated for the production of honey, especially the common hive or honeybee (*Apis mellifera*).

Sec. 3. That the Secretary of Agriculture is authorized to provide for and make upon application any necessary inspection, sterilization, and certification of honeybees and used apiary equipment in any state, territory, or district statutes or laws, inspection and sterilization is not provided for under the authority of state, territory, or district statutes or laws, or in other cases in his discretion, and to charge such fees therefore as will approximately cover the expense of such inspection.

Sec. 4. That the Secretary of Agriculture is authorized to make and promulgate such rules and regulations as may be necessary for carrying out the purposes of this act; and governing the methods and conditions of transportation, or shipping of bees, used apiary equipment and bee products from one state, territory, or district of the United States to other states, territories, or districts. He shall prescribe forms of certificates and permits; and he is hereby authorized to cause the destruction under said rules and regulations of all bees and used apiary equipment adjudged to be infected with any contagious or infectious disease, or to have been shipped or transported in violation of this act or any rules or regulations promulgated thereunder; and no compensation shall be awarded to the owner for the loss of any bees or equipment so destroyed.

Sec. 5. That any person who shall violate any of the provisions of this act or any of the rules and regulations promulgated by the Secretary of Agriculture under the

authority of this act, who shall forge, counterfeit, alter, deface, destroy or misuse any certificate provided for in this act or in the rules and regulations of the Secretary of Agriculture, shall be deemed guilty of a misdemeanor and shall, upon conviction thereof, be punished by a fine not exceeding five hundred dollars, or by imprisonment not exceeding one year, or both such fine and imprisonment in the discretion of the court; and it shall be the duty of the United States attorneys diligently to prosecute any violations of this act which are brought to their attention by the Secretary of Agriculture, or which come to their notice by other means.

Sec. 6. That the word "person" as used in this act shall be construed to import both the plural and the singular as the case demands, and shall include corporations, companies, societies and associations. When construing and enforcing the provisions of the Act, the act, omission, or failure of any officer, agent, or other individual acting for or employed by any person within the scope of his employment or office, shall in any case be also deemed to be the act, omission, or failure of such person as well as that of the individual himself.

Sec. 7. The Secretary of Agriculture shall assign the administration of this act to a Federal Apicultural Board consisting of three competent members appointed from existing bureaus and offices of the Department of Agriculture who shall serve without additional compensation.

Sec. 8. There is hereby appropriated out of any moneys of the treasury not otherwise appropriated, to be expended as the Secretary of Agriculture may direct, for the purposes and objects of this Act, the sum of * * dollars for the fiscal year ending June 30, 1925.

Sec. 9 This Act shall become and be effective from and after the first day of July, 1924.

WEATHER FORECASTS FOR BEE-KEEPERS

For some years past the Weather Bureau at Washington, D. C., has been assisting beekeepers by sending them forecasts of mild periods in the late autumn which are likely to be followed by cold and unsettled weather, in order that the bees may get a general flight as late in the season as possible but be housed before unfavorable conditions set in. Forecasts are also issued in the spring to guide beekeepers in removing bees from winter quarters. These forecasts have been sent to individual beekeepers on request, and there has been a systematic service of this character in New York State, carried out in cooperation with the apiary department of the State College of Agriculture.

At the request of the American Honey Producers' League the scope of this work is to be enlarged so that beekeepers in any part of the country can have sent to them such forecasts as they may desire. The Weather Bureau will make no charge for its services, but recipients will be expected to pay the telegraph charges.—*The Official Record.*

Be sure to feed the bees if they need it.

Gossip With Our Neighbors

Discussed by

E. GUY LESTOURGEON

P. O. Box 1048

San Antonio, Texas

The Christian Science Monitor of Dec. 8th reports that twenty carloads of white sage honey, valued at more than a million dollars, have been shipped out of the one little station of Fallbrook, Calif. This phantom honey was shipped "to eastern markets, mainly New York." Alas! we wish it were true. But the good old days will come again and we hope that during 1924 our brothers in San Diego County may really and actually ship their twenty cars of real honey, not the Christian Science kind.

A. F. Mead, on page 597 of December American Bee Journal rather amuses me when he suggests that Texas beekeepers are forced to find a far away market for their honey. He does not know the facts. The per capita American consumption of honey is a little less than two pounds. The consumption of honey in Texas is over five pounds per capita, or more than two and a half times the National average. Our market is at home. To supply it we are forced, despite our enormous production, to import honey into Texas every year. Mr. Mead could learn something by reading the Bureau of Markets figures.

Radford Grocery News, published at Abilene, Texas, carries several columns of recipes for delicious candies and other Christmas goodies which can be made from honey, in its December issue.

Dr. A. P. Sturtevant, who visited Texas a few years ago and assisted in holding a short course at San Antonio, has recently resigned his position with the Bureau of Entomology, to accept a position of Instructor in Bacteriology in the New York Homeopathic Medical College of New York City.

"Consumers do not stop to consider the cost of transportation, the cost of warehousing, advertising, and of the hundred and one other

things that enter into the cost of getting the goods to them in the most convenient form and just at the time they want them," says December Beeware Bulletin. We think that those producers who always cry about the "spread" of honey prices are equally blind. What should I care what the retail price of a jar of honey is, if I have a steady market at a living price for all I can produce?

J. Skovbo does not spare the rod, in December Western Honey Bee, when he chastises the California bee men for their loose and senseless marketing methods. He says that this year California honey has been offered at 8¼ cents, delivered in Portland, Ore. He comments, "when this happens in a year when California complains of a crop failure, can you blame us if we pray the Lord to deliver us from a California bumper?" The editor defends his state by suggesting that the honey may have come from Hawaii and was fraudulently misbranded "California."

Your Gossiper had the pleasant experience, during December of attending several state and regional beekeepers' meetings. He was at the Iowa State meeting, Dec. 5th; Illinois, Dec. 7th; Chicago Northwestern, Dec. 8th, and Minnesota, Dec. 10-11th. We were happy in meeting many old friends and in making new ones. Everyone of the fourteen days was a day of pleasure.

In an Editorial on page 773 of December Gleanings, E. R. Root speaks of the great value of perfect brood combs. We hope that he will have a few hundred aluminum combs drawn out during a heavy honey flow. He will then see a sure enough perfect brood comb. We often encounter solidly capped brood from the top row of cells to the bottom bar,—and not a drone larva to the square mile.

The Beekeepers Review, page 5, in the December issue, states that starving out the bees has imperiled the California fruit crop and says that bee men are being welcomed to place new apiaries among the orchards. As time goes on the people of this country will come to realize that our industry is essential to the success of the horticulturist, and that even agriculture cannot exist without us.

L'Abielle Belgique gives us the interesting information that M. Poincaire, Premier of France, was a beekeeper in the Meuse before the German armies laid waste the region. Beekeeping is being reestablished in the devastated area.

American Bee Journal devotes a lot of space in the December number to the use of honey as an "anti-freeze" mixture in automobile radiators. If this matter develops as it should we need no longer worry about a market for our amber or off-grade honey.

Michigan Beekeepers Letter for December remarks that reports show that the price of white honey, wholesale, is now practically on the same level as in 1923. The main difference in our favor seems to be that the price tendency is now stronger and that stocks are light.

We asked for an article on honey dew in this department last month. It came quickly. On page 561 of the American Bee Journal, Geo. D. Shafer treats of the honey dew produced by an insect gall on the valley oak of California. This is a start. There is a considerable field of research open in this matter of honey dews and extra-floral nectars.

ASSOCIATION MEETINGS IN DECEMBER

Many state associations held their meetings during December and, despite the unsatisfactory crop harvested during the past season they were very well attended, and much good in the direction of more intelligent marketing will come of them.

Iowa Beekeepers Meet

This meeting was held at the Savory Hotel, Des Moines, Dec. 5th and 6th, in conjunction with the meeting of the Iowa Horticultural Society and its affiliated branches. Among the out-of-state speakers at the meeting were, H. C. Dadant, Frank C. Pellett and E. G. LeSturgeon. A large and well attended banquet with over 250 present at the board, was had on the evening of the 5th. F. B. Paddock was re-elected secretary of the Association.

Illinois State Meeting

The meeting was held on Dec. 6-7, at the St. Nicholas Hotel, Springfield. Mr. Wallace Park, lately of Ames, but now an instructor at Urbana.

made his bow to the beekeepers of Illinois. Other speakers were, Geo. S. Demuth, E. G. LeSturgeon, and W. A. Hunter, besides many others who reside within the state. Dr. A. C. Baxter, who has served so long and faithfully as president, resigned because he is leaving the country to take up special work in Edinburgh, Scotland. Mr. J. R. Woolridge was elected President and M. G. Dadant, Secretary.

The Chicago-Northwestern

On Dec. 7-8, this Association met at the Gt. Northern Hotel, Chicago. Its President, G. H. Cale, and Secretary, J. F. Haan, were elected. E. G. LeSturgeon gave an address on honey marketing. Other speakers were C. P. Dadant, Geo. S. DeMuth, Edwin A. Winkler and E. S. Miller.

Wisconsin Get-Together

The annual meeting was held in Milwaukee, Dec. 6-7, and was called to order by President James Gwin. Malitta D. Fischer was elected Secretary. Among the speakers were E. W. Atkins, S. B. Fracker, and Geo. S. Demuth.

Minnesota to Cooperate

On Dec. 10-11, at the West Hotel, Minneapolis, the annual beekeepers meeting was held. Among the speakers from without the state were Edwin A. Winkler, C. P. Dadant and E. G. Sturgeon. A committee was appointed to work out plans for the organizing of a co-operative marketing association for handling Minnesota honey.

Oregon Closes Fourth Year

The fourth annual meeting was held at Hermiston, Dec. 11-12. The marketing problem received most attention. Many beekeepers from the state of Washington attended. The leading speakers were, B. F. Slocum, Geo. W. York, J. Skovbo and Gladys Whitsett. J. Skovbo was elected President for the coming year, and H. A. Scullen, Secretary.

If the apiarian succeeds in keeping his colonies strong they will be their own best protectors; and if he does not keep them strong they would be of little value, even if they had no enemies.—*L. L. Langstroth.*

One of the best investments that a beekeeper can make is to put a dollar in a year's subscription to a good bee journal; and he will find the returns from it to be exceedingly great.

Texas Honey Producers Ass'n

Notes by

E. G. LESTOURGEON, Manager

P. O. Box 1048 San Antonio, Texas

ANNUAL STOCKHOLDERS MEETING

According to the by-laws the annual stockholders meeting is to be held in San Antonio, Texas, at 10:30 a. m., Tuesday morning, January, 15th, 1924. We will have to have a majority of stock present, either in person or by proxy. Do not fail to come or send your proxy. If you send a proxy name someone whom you know will be here. You may name the Secretary or any Director or officer of the Association as your proxy. The law requires that you affix a 10 cent revenue stamp to the proxy before it can be used. If you know that you cannot be here on Tuesday, Jan. 15th be sure and make out your proxy, put a 10 cent documentary stamp on it and send it in at once. Do it today.

Get Ready for 1924

The assurance of there being a world of annual pollen and nectar bearing plants ready to spring into bloom at the first warm or sunshiny spell of weather, will make the year of 1924 an unusual one for brood rearing and consequent swarming. We expect an abnormal swarm period. The past two years there has been little swarming. Queens are old. The bees will simply boil out during March. Be ready for them or take preventive and control measures early. During the next two months is the time to clean up your old hives, paint them, and prepare for what is sure to come. You will need frames, especially. Be sure and order them early. Do not wait until the last minute. When the time comes the bees will not wait.

Beekeeping Literature

Do not overlook the value of good bee books. The children will be better beekeepers than we are. Texas will one day produce ten times the honey it does now and this business of beekeeping will one day be a major industry. Post yourself and give the youngsters a good start by having a few standard books on beekeeping

in your home. We carry in stock and recommend any of the following:

First Lessons in Beekeeping.....	\$1.00
Dadant System of Beekeeping.....	1.00
American Honey Plants, Frank C. Pellett..	2.50
Beekeeping in the South.....	1.00
Beginners Bee Book.....	1.25
Beekeeping by E. F. Phillips.....	2.50
Management of Out Apiaries.....	1.00
Productive Beekeeping	2.50
Practical Queen Rearing.....	1.00
A Thousand Answers to Beekeeping	
Questions	1.25
The Hive and the Honey Bee.....	2.50

The last named is the best and greatest of all bee books. It is a revision by C. P. Dadant of the original book by Dr. L. L. Langstroth. It is brought up to date and covers every phase of beekeeping.

Besides good bee books one should read the bee magazines to keep abreast of the times. We will gladly send a sample copy of each of the following three to anyone who is interested enough to drop us a postal.

The following magazines we particularly urge our members to read:

The American Bee Journal.....	\$1.50
The Beekeepers Item.....	1.00
Dixie Beekeeper	1.00

We can send all three to one address for \$2.75. The American Bee Journal can be clubbed with either of the other two for \$2.00. Send us your subscriptions either new or renewal.

The 1924 Supply Catalog

The Beware Catalog will reach you during January. Should it fail to come don't be modest Demand a visit from her. Drop a card to the Association office. She will come by next mail. You will be the loser if you do not get our Beware Catalog this year.

The factory is going to give away \$275.00 in cash prizes this spring for the best letter or article on "how to market honey." Restrict the article to 1000 words or less and mail it in not later than April 30th. The prizes ought to be won by Texans and you have a chance to get one of them. The population of Texas eats over five pounds of honey per capita per year which is 2½ times the average (less than 2 pounds) consumption for the United States. This shows that Texas Beekeepers know "how to Market Honey." All we have to do to win the prizes is to tell others how we do it.

We raise lots of honey in Texas, too. Our Beeware helps us do so. We think that one reason why Texas leads in honey production is the almost universal use of our Beeware in our state. The Beeware Catalog is no stranger in the home of a Texas Beekeeper. Let us all resolve to consult her first and last and all the time. The word "Beeware" stands for service and quality.

A Message From The Factory

For 50 years this company has given its best to the progress of beekeeping, helping to develop honey production from almost nothing into a many million dollar industry. Future opportunity for profit in beekeeping far exceeds anything in the past, and its chief problem, we believe, is the intelligent marketing of honey, under plans that will stabilize price and markets teach the public the many values of honey as a food and so multiply the demand, as had so successfully been done for other food products. We therefore offer these cash prizes aggregating \$275 for the best 28 stories or papers dealing with the subject of honey selling. If you have worked out a plan for marketing your crop profitably and increasing the use of your honey year by year locally, your story stands an excellent chance of winning one of these prizes. If you have an important suggestion or practical plan to help develop the sectional or national market and appetite for honey, write on this subject and your paper will be entered. In other words, you can write either on the development of a local market, a market in a large district or the national market.

Watertown, Wis.

G. B. Lewis Co.

RESULTS OF MICHIGAN MEETING

RUSSELL H. KELTY

The 54th Annual Meeting of the Michigan Beekeepers' Association was held in the City Hall, Lansing, December 13th and 14th. About one hundred beekeepers were in attendance, although several of the "Old guard" were not present because of sickness or other causes. There were many new faces in the audience.

As usual, the discussions and papers regarding the honey market and marketing led in interest. The business session was characterized by strong resolutions. Action was taken:

(1) To organize a Michigan section of the

American Honey Producers League. This means that in the future Michigan Beekeepers can join the Michigan Beekeepers' Association apart from the League, or can become members of both the Michigan Association and the League if they choose.

(2) Since honey bees are obviously of much greater importance to general agriculture through their agency as pollenizers than they are as honey producers, it was decided to petition the next Legislature for state aid in furthering the purposes of the Michigan Beekeepers' Association.

(3) Since Mr. E. B. Tyrrell, formerly Superintendent of the Apiary Department, has resigned that position on account of a lack of time to devote to the work, Mr. George W. Dickinson, Secretary-Manager of the Michigan State Fair in a written communication to the convention asked the pleasure of Michigan beekeepers in the future management of this department. A resolution was drawn commending Mr. Tyrrell's work in the past and pledging the support of the Association to the continuance of this department.

(4) Resolutions calling on the Department of Entomology at M. A. C. to acquire more complete equipment for the college apiary and for further investigation into apicultural problems were also adopted. Officers for the ensuing year were elected as follows: President, Paul T. Ulman; Vice-President, Edwin Ewell; Secretary-Treasurer, Russell H. Kelty. Executive Committee members; O. H. Schmidt, W. J. Manley, David Running. Delegate to the American Honey Producers League, B. F. Kindig. Lansing, Mich.

A GOOD TIME TO WRITE ARTICLES.

If those of you who have a little leisure time, and there is opportunity for it now, with the long winter evenings, we would suggest writing down your experience in one or other beekeeping subject. We will soon want to know what best to do with our bees in order to get them through the trying times of spring breeding. Then we want to know how to get our colonies strong for the honey flows.

In the meantime we may want to rear some queens, to make increase, and we would like to know more about that also. Tell us what you know about these things.

The Honey Crop Conditions

Conducted by

MISS A. M. HASSLBAUER

P. O. Box 1048

San Antonio, Texas

Plant and bee behavior this fall has been an interesting phenomenon. After the long drought the fall rains seen to have brought about a condition approximating spring. Fruit trees, especially plums, peaches and pears, have been in bloom in a half-hearted sort of way. Up to December 1st swarms were reported here and there by beekeepers in Southern Texas. Colonies have been bred up to enormous population and if winter stores are sufficient we should have fine conditions in our hives when spring opens.

There will be a lot of swarming next spring. Fall brood rearing has been heavy and these queens will want to issue as soon as conditions warrant. The late frosts of the past two seasons have retarded swarming and this will also have a tendency to increase it beyond normal during 1924. Careful measures of control or prevention will have to be practiced.

Beekeeping now requires a great deal of attention. With the prospects as encouraging as they are it would behoove us all to save every colony possible. Large numbers of bees will consume relatively larger amounts of stores. Feeding is advisable wherever doubt exists.

Honey demand has slackened up, as is usual at this time of year. A heavier demand may be anticipated after the first of January. Stocks are light and prices are holding firm.

CONDITIONS IN CAPE HATIEN

Consul DAMON C. WOOD

The extraction and exportation of honey has been a minor industry in Haiti for a number of years. Practically all of the product goes to France where it has, like Haitien coffee, a recognized demand. A year ago Havre quotations for Hatien honey had dropped to 155 francs per hundred kilos, but a gradual recovery took place during the past season and a recent quotation of 320 francs has, despite the depreciation in the franc, given a marked stimulus to the honey trade in this territory.

About 1500 barrels of 32 gallons each, will represent the seasons shipments from Cape Haitien. A leading shipper states that the total for the other ports of Haiti will not exceed 1000 barrels.

Cape Hatien, Haiti.

UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF MARKETS AND CROP ESTIMATES SEMI-MONTHLY REPORT

INFORMATION FROM PRODUCING AREAS (FIRST HALF OF DECEMBER)

CALIFORNIA POINTS:—Southern Calif. Rainfall light so far this season but sufficient to put sage and other wild ower sin good shape. Many beekeepers think colonies which have ben cared for are holding their own and will come thru in fair condition. Numerous producers reported trying to sell out, discouraged by weak starving colonies, disease, and lack of satisfactory returns. Few sales reported Carlot light amber alfalfa sold at 8—8½ per pound, extra light amber save 10c white orange 12c per pound.

Beeswax sold at 20—22c per pound. Some intermountain honey brought in to supply local demand.

Northern California:—Continued clear weather and absence of killing frosts enable bees to get what little nectar is being secreted. Little honey left unsold in beekeepers hands. Practically no sales reported. Few ton lots white star thistle listed at 12½c per lb., 10c per lb., offered for carlot but refused. Beeswax selling at 23c per pound cash, or 24c in trade.

PACIFIC NORTHWEST:—Market firm. What honey is still in producers hands is generally being held for higher prices. Carlots of white extracted quoted at 10—11c per pound, ton lots 11—12c, single 60s, 12—13c, small pails 15—18c wholesale 13—16c per pound. Few sales fancy white comb at \$5.50 per case. Some beeswax sold at 25c per pound.

INTER-MOUNTAIN REGION:—Bees in good winter condition thus far but many are light in stores. Mild weather has permitted frequent flights of bees except in northern districts. Prices are holding up and the market for extracted honey continues firm to strong. Carlot inquiries fairly nuemrour but actual sales have fallen off as supplies are getting well cleaned out of the original hands. One reporter estimates that not over 5% of the Idaho and Utah crop remains in the hands of producers. Carlot sales white sweet clover and alfalfa reported at 8½—9½ few 10c per lb., ton lots 8½—11½c single 60s 10—13 1/3c, small pails whole-sale 12—15c per pound. Holders are generally asking 10c per pound in carlots.

Comb honey and number 1 sold at \$4.50; number 2 at \$4.25 per case; small lots number 1 ranging \$4.50 to \$5.50 per case. Beeswax has sold at 22 to 25c per pound.

ARIZONA POINTS:—Where sufficient stores have been let, bees have gone into winter quarters in good condition but warm winter is consuming unusual amount of stores. Frequent rains have advanced vegetation and prospects are favorable for 1924. Honey is now practically all out of producers hands. One car alfalfa and cotton reported sold at 8c per pound.

TEXAS POINTS:—Copious fall rains have put early spring plants in excellent condition. Prospects look especially bright for a good crop of horsemint. Some colonies still weak and of doubtful survival but many secured sufficient fall flow for partial stores and are strong in bees. Supplies of extracted, and especially of bulk comb practically exhausted.

PLAINS AREA:—Hinter continues open and bees have consumed unusual quantities of stores. Ample moisture has been favorable for condition of honey plants next season. One carlot white extracted reported sold at 9c per pound,

ton lots white 12c, amber 9c, single 60s white 14—15½, small pails 13½—15c per pound.

EAST CENTRAL AND NORTH CENTRAL STATES:

—Bees have flown but little during past two weeks. Supplies of honey, especially those in the hands of small producers, have been generally cleaned up. Ton lots white extracted have sold at 9—12½c per lb., single 60s 11—16c, few low as 9½c, small pails 14—15c per lb., amber extracted ton lots 9c, single 60s 10—12c per lb. Few sales white comb number 1, \$4.50 to \$5.00; number 2, \$3.90 to \$4.50. Queen breeders are predicting a large business for next year. Large orders being placed also for brood frames and queen cages.

NORTHEASTERN STATES:—Continued warm weather has given bees several good flights, and is favorable to wintering, but has caused large consumption of stores. Most colonies are in winter quarters and in good shape. White comb is largely exhausted; a small amount of buckwheat comb is in the hands of producers. Extracted buckwheat is becoming scarce, white extracted is moving fairly well. Extracted white clover quoted around 12½—15c per pound, in single 60s, 10c per pound. In ton lots, or 14—20c, few 25c per pound in small pails. Buckwheat extracted in kegs 9c per lb. Carlots comb white clover number 1 have sold at \$4.50 to \$4.75, buckwheat number 1 \$3.50 to \$3.75 per case. Small lots white comb ranges \$3½ mostly \$4—5.50 per case. Buckwheat \$3—5 per case.

SOUTHEASTERN STATES:—Bees generally quiet, flying on warm days in some sections. Many colonies in northern Florida and in Black Belt of Alabama have insufficient stores to winter properly. Honey largely out of beekeepers hands. One carlot sale light amber extracted reported at 8c per lb., less carlot sales light amber 8—10c, amber 6—8c, few 10c per lb. Few sales amber comb at \$4.50 to \$5.00 per case.

WEST INDIES:—**PORTO RICO:**—Weather has been unreasonably warm. Bees in good condition in hill districts doubling yield of two past years. Price has dropped around 5c per gallon to 65c per gallon.

CUBA:—Price has advanced slightly, several carlots being shipped to Amsterdam at 77c per gallon including cost and freight.

TELEGRAPHIC REPORTS FROM IMPORTANT MARKETS.

Arrivals cover receipts for preceding two weeks. Prices represent sales or current quotations, as secured from the original receivers, but must not be understood as attempting to forecast future market conditions or prices in any degree. Market condition comments represent the opinion of the trade, and their accuracy is not guaranteed by the Bureau of Agricultural Economics. Market reports are for December 14.

BOSTON:—Since last report 125 cases Vermont and 115 cases New York comb arrived. Half car Porto Rico and half car Calif. extracted arrived. Demand and movement slow, market slightly weaker.

COMB:—Sales to retailers. N. Y. and Vermont, 24 sect. cases No. 1 carton stock \$6—6.50 Vermont 20 section cases carton stock \$5—6.

EXTRACTED:—Sales to confectioners and wholesale grocers per lb. Porto Rico light amber 10c, dark 8½—9½c. Hawa 11 white 10c for large lots, 12c for single packages. Colorado, white Sweet clover 14c. California light amber sage 13c.

CHICAGO:—Since last report 1 car Michigan, 200 lbs. Nebr., 3400 lbs Wisc., arrived. Demand and movement quiet, prices slightly lower than last report but feeling is improving.

EXTRACTED:—Sales to bottlers and confectioners. Utah, Ariz., Calif., Colo., and Mont. alfalfa and sweet clover white 11—11½c, light amber 9½—10c, dark amber mixed Mountain flowers 8—9c. Wisconsin, Ill., and Iowa white Clover fcy. 12—13c, light amber 9½—10½c.

COMB:—Sales to retailers. Ariz., Mont. and Colo., alfalfa and sweet clover fancy white \$5.25—5.50. Choice

\$4.50—4.75. N. Y. white clover fcy. \$5—\$5.25, choice \$4.75—\$5, Ill., Ia., and Wis. white clover fancy \$4.75—\$5, choice \$4—\$4.50.

BEE SWAX:—Demand and movement moderate, market about steady. Utah and Ariz., light 29—31c, dark 26—28c. Central America best light 25—27c, dark dirty 17—22c.

DENVER:—Demand and movement slightly improved account smaller producers who have been supplying trade about sold out. Prices unchanged.

EXTRACTED:—Sales to candy manufacturers and bakers per lb. Colo. sweet clover and alfalfa white 14½c, light amber 13½c.

COMB:—Sales to retailers: Colo 24 sect. cases white alfalfa and sweet clover choice \$5.60, o grade \$5.

KANSAS CITY:—No carlot arrivals since last report. Supplies moderate. Demand and movement moderate, market steady. Sales to jobbers:

COMB:—24 sect. cases Colo. white alfalfa extra fancy \$6; fcy \$5.75; No. 1 \$5.50.

EXTRACTED:—Per pound. Colo. alfalfa white 12c, light amber 11½c.

MINNEAPOLIS:—No large arrivals since last report. Supplies light. Demand and movement moderate.

COMB:—Market firm. Sales to retailers, 24 sect., cases Iowa and Colorado white clover No. 1 \$6—7.

EXTRACTED:—Sales to retailers, confectioners and bakers. Wisconsin and Minnesota white clover 12—13c per pound.

NEW YORK:—**EXTRACTED:**—Since last report 57 bbls., and 9 cases Porto Rico, 127 cases Greece, 12 cases Palestine arrived. Domestic receipts moderate. Demand light, dull market, very little trading. Sales to jobbers, wholesalers, confectioners, bakers and bottlers; per lb. N.Y. white clover 11½—12½c buckwheat 10—10½c, western white clover 12 to 12½c. Calif. white orange 16c. Correction: originating state for buckwheat, in last report should have read "New York" instead of "Intermountain".

COMB:—24 sect. cases Eastern, white clover extra fancy \$6; fcy \$5.50 No. 1 \$5 and No. 2 \$4.50 per case.

BEE SWAX:—Since last report 325 packages Holland 80 packages England, 149 bags Spain, 200 bags Germany, 30 packages Arabia, 26 bags Cuba, 13 bags Porto Rico, 4 packages Chile arrived. Demand light, market steady. Per pound Chile light 27½—29c. Brazil light 27—28c. West Indies light 28—29c. Italy light 25—26c. Africa 21—22c. West Indies dark 20—22c. Practically no domestic supplies.

PHILADELPHIA:—No new arrivals since last report. Holdover supplies moderate. Practically no demand or movement, market steady.

EXTRACTED:—Sales to manufacturers and bakers. Porto Rico various varieties amber 82 c per gallon, light amber 10½c, amber 10c per lb. No dark or light amber honey put into 60 lb ccans from barreled stock.

ST. LOUIS:—No large arrivals since last report. Demand moderate, movement slow, market dull to steady.

COMB:—Sales to wholesalers and jobbers: Mich. and Wyo. 24 section cases \$5.75.

EXTRACTED:—Sales direct to retailers. Western light amber and white sweet clover 10—10½c per pound.

SAN FRANCISCO:—Supplies moderate. Demand and movement moderate, market steady. Sales to jobbers.

Extracted:—Calif. Nev. and Ida., light amber alfalfa 8½—10c, dark amber 7½c, Calif. star thistle 11c light amber orange 12—12½c. Hawaii white 8 3/4, light amber jobbing 8½c, carlot 8½c, dark amber 7½c.

COMB:—California and Nevada No. 1, \$5.00—\$5.50; No. 2 \$4.75 per case.

BEE SWAX:—California 27c, Hawaii 25c per pound.

H. C. TAYLOR,
Chief of Bureau.

Have you a picture of your apiary or other object of interest to our readers? We are always glad to have these, together with a short sketch explaining them.

CLASSIFIED WANT ADVERTISEMENTS

Rates in these columns are 15 cents a line. Minimum charge will be 50 cents. When sending advertisements for this department it must be so stated or we will not be responsible for errors.

BEES AND QUEENS

IF YOU HAD trouble introducing queens into your package bees try Dalton's introduced-laying-enroute queens and package bees. Send for circulars and other information. Jes Dalton, Bordelonville, La.

BEES FOR SALE—30 stands cheap, in 10 frame Langstroth hives. In good condition. Write G. H. Shiner, Gonzales, Texas.

QUEENS—At pre-war prices, Golden and 3 Banded Italians, also Carniolans. Tested \$1.00; untested 75c each. Will be ready to ship in April. Write for prices on larger lots. C. B. Bankston, Box 65, Buffalo, Texas.

PURE ITALIAN QUEENS—Selected untested, 1, 90c; 12, \$1.00; 100, \$7.00. Selected tested, 1, \$1.35; 12, \$14. W. C. Smith & Co., Calhoun, Ala.

FOR SALE—Golden Italian Queens, Untested \$1.00 each, 6 for \$5.40; 12 or more 80c each, Tested \$1.50 each; Select tested \$2.50 each. No disease of any kind, safe arrival and satisfaction guaranteed, Sam Hinshaw, Randleman, N. C.

HIGH GRADE QUEENS—Three band Italians, Goldens, Carniolans. Untested, One \$1.25, 6 \$6.50, 12 \$12. Tested, one \$2.00; 6 \$11.50, 12 \$22. Safe arrival, pure mating and satisfaction guaranteed. No disease. Also package bees. P. O. Watkins, Culasaja, N. C.

THREE BANDED ITALIANS and their hybrids. Good Strain. 3-frame nucleus without queen \$3.80. With queen from three banded stock \$4.70. All on selected combs of brood and liberal supply of bees. Write for particulars. Aug. Teufel, Round Top, Texas.

THAGARD'S ITALIAN QUEENS—Three banded breeders direct from Italy. Golden breeders yellow to tip, and have the good qualities of the three banded. Queens, 1 to 4, \$1.00; 4 to 12, 90c. Satisfaction guaranteed. The V. R. Thagard Co., Greenville, Ala.

FOR SALE—In sunny Idaho, the land of large honey yields, where crop failure are unknown. A thousand colonies of bees in prime condition. Ten frame L. hives. Buying now secures this seasons honey crop. Reason for selling. Wives health requires lower altitude. Address, 273 South First West St., Rexburg, Idaho.

BEES AND QUEENS

TRY ME—Two frames nuclei with queen \$4.50. Tested queen \$2.00. All money deposited in bank subject to withdrawal in case order is not filled. Terms cash with order. Delivery made April and May. R. T. Brooks, Odem, Texas.

FOR 1924—Three banded Italian queens untested \$1.00 each, \$10.00 per doz. A. J. Trayler, Rt. No. 5, Box 112, Belton, Texas.

HONEY GIRL QUEENS AND PACKAGE BEES—Free offer: 100 Lin Bred Honey Girl Breeding Queens to be given free. Write for Price list and full particulars. F. A. Martiny, Distributor for Honey Girl Queens and Package Bees, and Root Quality Bee Supplies. New Orleans, La.

FOR SALE—100 stands of bees with full equipment; also 15 acres land; priced reasonable. G. V. Sumner, McMurray, Wash.

QUALITY ITALIAN QUEENS—Large and prolific \$1.00 each, \$5.00 for 6. Pure mating, safe arrival and satisfaction guaranteed. J. J. Scott, Crowville, Louisiana.

HIGH GRADE QUEENS—3 banded and golden. Untested, one \$1.05. Tested \$1.75. Select tested \$2.00. E. J. Konercheck, Eagle Lake, Texas.

GOLDEN QUEENS GOLDEN—1923 prices. Untested, one \$1.25, dozen \$11.00. Select, one \$1.50, dozen \$13.50. Write for prices of pound pkgs. and nuclei. Pure mating and safe arrival guaranteed in U. S. and Canada. Tillery Bros., R-5, Greenville, Ala.

BEES AND QUEENS—Package Bees, Two Frame Nuclei, Fine Italian Queens. Prompt shipment. Safe delivery guaranteed. Lowest prices compatible with service. Special prices on quantities. Sunny South Apiaries, P. O. Box 838, San Antonio, Texas.

ITALIAN QUEENS—Three banded hustlers. Select untested, one, 75c; six, \$4.00; twelve, \$7.50. Select tested, one, \$1.50; six, \$8.00; twelve, \$15.00. Shipped when you want them. Satisfaction guaranteed in United States and Canada. J. M. King, P. O. Box 151, Autaugaville, Alabama.

BEES BY THE POUND, ALSO QUEENS—Booking orders now. Free circular gives prices, etc. See large ad elsewhere. Nuces County Apiaries, E. B. Ault, Proprietor, Calallen, Texas.

SPECIAL NOTICES

FOR SALE—Fully equipped bee and chicken ranches. Thirty Acres land, Good houses, Water system. Home Market has used eight tons of honey. Never able to supply demand for eggs or chickens, ½ mile from P. O. on A. & P Highway. Reason for selling death in family. S. Mason, Hatch, N. M.

FOR SALE—2000 Colonies Bees free from disease equipped for extracted honey. Convenient and well located in alfalfa and sweet clover range. Some comb honey equipment. Also modern fire proof, 40x60 honey house and ware room, two trucks. Also 7 room, strictly modern, residence. All adjoining the business district on main street with pavement. One crop will almost pay out. After 33 years keeping bees I offer the above as a whole or in lots to suit, and to parties who may take all I offer a supply business in connection and a money trade taking 75 to 100 tons honey annually. Also I offer good 120 acre irrigation farm, alfalfa, cantaloupes, and sugar beets raised. Some terms on approved security. Bert W. Hopper, Rocky Ford, Colo.

GOLD ITALIAN QUEENS that produce bees solid yellow to tip, heavy honey gatherers, prolific and very gentle. Untested \$1.25 each, \$14.00 per dozen. Select tested \$3.00. Breeders \$5.00. Dr. White Bee Company, Sandia, Texas.

WANT—250 cuttings or rooted year old stock of Magnolia or Japanese Figs. W. B. Ivey, 333 St. Johns Avenue, South Jacksonville, Florida.

AIRDALE PUPS—4 months old. Also bred and unbred bitches. All stock highly bred and pedigreed. Priced reasonable. Holbrook Farm Kennels, DeQuincy, Louisiana.

BEEWAX WANTED—We need large quantities of beeswax and are paying good prices now. Ship to us at Hamilton, Ill., or Keokuk, Iowa, or drop us a card and we will quote f.o.b. here or your own station as you may desire. Dadant & Sons, Hamilton, Illinois.

RELIGIOUS CHART—I am offering to give away Religious literature. A very large Ten Commandment Chart. 2 feet by 16 inches, also tracts on different subjects. All I ask is 10c in coin, or stamps to cover postage; Karl J. Lohman, Cameron, Mo.

OLD BEE BOOKS wanted. Prof. Francis Jager, University Farm, St. Paul, Minn.

MISCELLANEOUS.

FOR SALE—On account of failing health I offer my entire business of colonies bees, 600 full supers combs, tanks, boiler engine, extractors, with 5 acres irrigated land, with buildings. This business is a good one. My record for 7 years is 294 lbs per colony average per year. Bees wintered 100%. All young queens. Free from disease. Priced right for a quick cash sale. Only interested parties need answer this advertisement. The Custer Battlefield Apiaries, Hardin, Montana.

THE BEE WORLD—The leading bee journal in Britain, and the only international bee review in existence. It is read, re-read and treasured. Will it not appeal to you? Specimen copy free from the publishers: The Apis Club, Benson, Oxon, England. Send us a post card today. It is well worth your little trouble.

OLD COMB—Don't throw away your old combs. Save them up and ship to us. We will get a lot of wax out of them for you and pay you market price for it or make them into foundation for you. Write for rates. Dadant and Sons, Hamilton, Illinois.

HONEY AND WAX.

FOUNDATION MILL—Root 10-inch roller Foundation Mill in good condition. Price \$25.00, or will trade for bees, hives, honey, extractor, or other supplies. Holloway Bros. Marietta, Okla

OLD-TIME Bee Books, back to 17th century. List mailed. John E. Miller. Spuyten Duyvil, New York City.

POSITIONS WANTED.

WANTED—Young man with experience in beekeeping and with Ford cars, for a position the coming season in extensive honey business. Good position for reliable and industrious person. Moderate salary and the benefit of our more than thirty years' experience in extensive apiary management to begin with and open for promotion. In beautiful little city, healthful location, purest water, and hospitable community. State age, experience, salary expected references and other information in first letter. The Louis H. Scholl Apiaries, New Braunfels, Texas.

USE OUR CLASSIFIED ADS

STATEMENT OF OWNERSHIP, CIRCULATION, ETC., OF THE BEEKEEPERS ITEM, PUBLISHED AT NEW BRAUNSFELS, TEXAS AS

REQUIRED BY THE ACT OF AUGUST 24, 1912.

Publisher, editor, business manager and owner, Louis H. Scholl, New Braunfels, Texas; stockholders, bondholders, mortgagees, or other security holders, owning more than one per cent of stock, none.

(Signed) Louis H. Scholl,

Editor and Owner

Sworn to and subscribed before me this 30th day of September 1923.

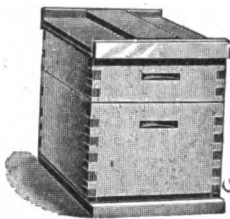
(Signed) R. A. Ludwig,

Notary Public.

My time expires June 1, 1923.

FOR SALE—100 Colonies Italians Bees. If interested write for particulars. Fay E. Ward, Marathon, Texas

HONEY CANS—We have a lot of used honey cans, 2-60 lbs. extracted cans to the case, at \$1.00 per case. Write us if you can use any. The Louis H. Scholl Apiaries, New Braunfels, Texas.



Texas Beekeepers---

We are now getting the **FINEST QUALITY** Leahy Bee Supplies in car quantities, and can make you attractive prices and give exceptional service, being located in Mills County, the Heart of Texas. We also Breed the **BEST BEES & QUEENS**. CATALOG FREE.

"Your Orders Will Be Appreciated"

ALBERT M. HUNT & SONS, Goldthwaite, Texas

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For anything you may have to sell or trade, or anything you may want, these little "want ads" will help you get it.

There may be something about your premises you have no further use for

but that the other fellow can use. There may be something you want that the other fellow has. These little "want ads" will help you get together. Use them at only 15 cents a line.

THE BEEKEEPERS ITEM, New Braunfels, Texas

KUNKEL HONEY EXTRACTORS

Full Line—Hand and Power

The Smallest to the Largest

Write for descriptive catalog

KUNKEL MFG. CO.

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Pellett's Practical Queen - Rearing

BY FRANK C. PELLETT

To get the best honey yields it is necessary to have good queens in your colonies. No matter how good your ability to care for the bees, how well adapted your hives, nor whether the honey flow may be abundant, the colonies will not give best results unless they are in first-class condition and strong in number of bees. This will depend upon the kind of a queen in the hive.

This new work on queen rearing methods should be in the hands of every beekeeper whether he owns a few or many colonies.

All the leading practical queen rearing methods are discussed in a plain manner so every reader can understand them. The book is worth many times its price.

You Need A Copy -- Order It To-Day

Arrangements have been made whereby a copy can be obtained with a club subscription to this publication. Price \$1.00. with The Beekeepers Item, the year, both \$1.75.

SEND ORDERS TO
The Beekeeper's Item
New Braunfels, Texas

What Some of Our Advertisers Say:

These are just a few letters picked up at random:

Glad to see The Beekeepers Item again. Also glad to get your bill, and equally glad to remit, so as to help keep the pot boiling.

We got to a standstill with our truck not long ago. Come to find out we were out of "lube". We are willing to do our part to furnish "lube" for our good little paper. Can't get along without it; hence we are sending the two little ads with request to run them again, and to cut others out.

Mathis, Texas.

Geo. W. Coltrin & Son.

Inclosed find check for \$2.00 to pay for advertising my bees. I must thank you very much for letting my ad appear in your bee journal as long as you did before I paid for same.

I finally got results and I am quite sure I never would have sold my bees if it had not been for The Beekeepers Item.

Eddy, Texas.

A. E. Hinze.

I am handing you herein my check for \$1.00 to pay you for changing my subscription date.

We have had some real good rains which have improved the prospects for this year a great deal.

Our bees are all in fine condition having lots of stores and brood rearing is well under way. The cold rainy weather of the last week did not seem to effect the laying of the queen.

Karnes City, Texas.

H. W. Isensee.

Enclosed find check for \$3.15 to pay class. advt., for June, July, August issues. The Beekeepers Item is O. K., as a journal to read and also to advertise in. as it has kept me hustling to furnish the hustling bees that I have advertised in this journal.

Autaugaville, Ala.

Respectfully yours,

J. M. King.

Write us for advertising rates

The Beekeepers' Item

New Braunfels, Texas.

CO-OPERATION
 Means BUYING RIGHT and SELLING RIGHT.
 We are a co-operative association and sell the
 best Bee Supplies obtainable at the right prices.
 It will pay Western Beekeepers to send for illus-
 trated Catalog.
COLORADO HONEY PRODUCERS ASS'N.
DENVER, COLORADO.

USE OUR WANT ADS
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ONLY 15c A LINE

STANDARD PRINTING COMPANY
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WALL PAPER, WINDOW GLASS

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Let us figure on your needs of Bee Hive and
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Prompt attention to out-of-town orders.

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Fletcher's Farming, a monthly farm
 and livestock journal for Southwest
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 scribe now. Subscriptions forwarded
 from this office. Farming and this
 journal both one year for \$1.50 if your
 order is sent to us.

THE BEEKEEPERS ITEM

New Braunfels, Texas

A NECESSITY

No longer an experiment, Texas made Aluminum Honeycombs are now an absolute necessity in the modern apiary. When preparing for 1924 be sure and make a liberal appropriation for these invaluable combs.

No drone brood

No loss from wax worms

No lack of storage space

Write for descriptive circular with name of dealer near you.

Aluminum Honey Comb Co. of Texas

San Antonio, Texas

Box 838

WE CLUB WITH OTHERS

So frequent are the inquiries for clubbing rates with other bee journals that we have again decided to offer these and accomodate our subscribers.

Our Special Clubbing Offers

Any of these will save you money and furnish excellent reading:

American Bee Journal, a year-----\$1.50	Western Honey Bee, a year-----\$1.00
With the Beekeepers Item, both----\$2.00	With The Beekeepers Item, both---\$1.75
Gleanings in Bee Culture, a year...\$1.00	Beekeepers Review, a year-----\$1.00
With The Beekeepers Item, both---\$1.90	With The Beekeepers Item, both---\$1.75
Dixie Beekeeper -----\$1.00	York's Bees and Honey a year----\$1.00
With The Beekeepers' Item, both---\$1.75	With The Beekeepers' Item, both---\$1.75

The Beekeepers Item

New Braunfels, Texas



Nordan's Three Banded Italian Queens



(Three Banded Only)

Mr. Beekeeper: Ten years ago I would gladly have given one thousand dollars for one queen immune to Bee Paralysis. Today I am offering you queens and bees that are guaranteed to be immune to Bee Paralysis.

Prices on Bees and Queens:

Select untested queens, each--\$1.00 1-lb. pkg. bees with select untested queen--\$2.50
 Select tested queens, each----\$1.50 2-lb. pkg. bees with select untested queen--\$4.00

Try them and be convinced that there is such a thing as a strain of bees immune to Bee Paralysis. They have been bred strictly for honey as well as all other points.

I guarantee safe arrival to all points in the United States and Canada.

M. S. NORDAN, MATHEWS, ALA.

Package Bees

Italian Golden Carniolan QUEENS

Hard winters and bad weather conditions in the north give the northern beekeeper something to think about.

It pays to get package bees and queens to replace your winter loss, or to make increase.

It pays to do away with your weak colonies in the fall or colonies having old queens and replace with package bees in the spring.

And then we hear some stating that it pays to do away with all their bees in the fall and get package bees in the spring.

On the other hand it pays the southern beekeeper to keep at all times young queens in his colonies. For years we have been shipping thousands of pounds of bees all over the United States and Canada.

Write for quantity price on Queens and Package Bees.

Place your order early and we guarantee delivery.

AULT BEE COMPANY

Capital Stock \$100,000.00

612 Houston Building

San Antonio, Texas

Successors to Nueces County Apiaries

Calallen, Texas

The OCTOBER, NOVEMBER, DECEMBER, 1923

Beekeepers

A Small Item In Itself,
A Big Item For Beekeepers

Item

THERE ARE many things that will yet be learned and discoveries will continue to be made in beekeeping just as in every other line of industry; but how great these will be as compared with what has taken place in the last half century we can not even guess. It need not be surprising, however, if very great changes will yet come, if we judge by the rapid advent in many other lines.

LOUIS H. SCHOLL, Editor and Publisher
New Braunfels, Texas

