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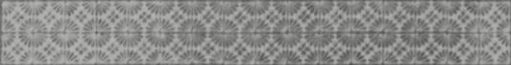
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P. O. BOX 18,

Beeville, - - Texas.



Volume 1.

Number 2.

The Southland Queen

DEVOTED TO THE EXCHANGE OF THOUGHTS
ON APICULTURE.

Published Monthly.

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BEEVILLE, TEXAS, MAY, 1903.

SWARMING DURING A HONEY DIRTH.

A Plan to Keep the Forces All Together.

This year I found many colonies preparing to swarm, and this at a time when there was no honey flow to speak of. I could not brush them on to foundation and run them for comb honey, as is my practice, for, owing to unprecedented cold, combined with very dry weather, there was not only no honey flow, but not even the hope of a future flow. Some way had to be devised by which I could keep the whole force together, in storing condition, if perchance a light flow did come, and also conserve their old stores of honey for future use or emergency. After considering all the plans I had ever heard or read of, as well as those I had practiced myself, I decided on a plan which has worked to my entire satisfaction. I do not know whether it will

work in all cases, and with all kinds and styles of frames, but I do know that it has worked well with the shallow hive, and in this particular locality. And as it may be of some interest or help to readers of the Southland Queen, I have decided to give it to the public, despite the fact that it has only been tried one season, and of course should not be too fully relied on without further trial.

As soon as queen cells were well started I brushed the swarm on foundation, and if a swarm came off naturally I dosed them to half sheets of foundation in the shallow six-inch hive body set on the old stand. In seven days I gave them ten of the shallow frames containing only honey, possibly a few bees along with the combs. I removed the old queen, and after carefully destroying all of the cells but one of the largest, I allowed the young queen to hatch, and in three days more placed the several bodies containing all the bees and brood to-

gether. The young queen mated from the old stand, and the incipient cells started by the old bees were promptly destroyed, thus I have kept my bees strong, and have also conserved their honey for future use. They are now storing a little by reason of their great strength. Here is one of the splendid advantages of shallow frames and hives. By their wise and timely use much can be done to prevent swarming when there is no flow of nectar, and if a colony does swarm they can be so manipulated that no force of any great consequence will ever be lost. Bees and brood can be changed from one strong colony to one weaker, and all with a facility not to be attained by the use of any other hive or frame. I have found out that for me, at least, no set rules can be laid down for my guidance, for a good many seasons my bees do not swarm. The reason is plain enough to me, but with regard to the reason why they do not again work up to the swarming point after being manipulated as above described, I will say there are two very important reasons, and many lesser ones. The first, I think, the most important one, is that the force of bees have mostly become field bees, and they have been given a start toward building a new home, and that always has a tendency to put a stop to the swarming

passion. Another reason is that they have a new queen just beginning to lay, and she will not from the nature of the seasons reach her limit in egg production until another season. These are, I think, reasons known to every posted bee man in the whole land, and needs no explanation from me. Some of the minor reasons are, in most sections of the state, and in many others, a dirth of pollen is apt to ensue, or a heavy honey flow start, when all disposition to swarm is abandoned, and the second predominating instinct of bee nature comes into full play. This latter predominating instinct, when fully incited, just before the swarming fever comes on, almost invariably results in modifying or entirely counteracting it, and also goes a long ways toward explaining why bees swarm more in some seasons than in others. As stated before, my bees swarm but little as a rule, and it is largely owing to the fact that I have a good strong honey flow before the bees reach the condition of swarming, and the honey gathering instinct is in the ascendancy, and they exhaust their energy in honey gathering rather than in brood rearing, but this year was an exception, for controlling influences were reversed, and my settled plan of brushing for the production of fine comb honey could not be carried out. But the next best thing was

done, and the bees are yet in fine condition for any flow that may come later, and if this shall suggest any method by which a brother can be benefitted or assisted out of a difficulty like my own, I shall be amply repaid for the time and labor required to make this plan known.

J. E. CHAMBERS.

Vigo, Texas.

FROM LAMPASAS COUNTY.

It requires much thought and study, and I might add, practice, to become a successful bee-keeper. Most any one can keep bees after a fashion, and if they happen to be in a good location they will once in a while secure a good crop of honey. But to be successful bee keepers we should study our location, learn our honey plants and so manage our bees that we could get a paying crop of honey each season. That is what it takes to be a bee master. I am fully convinced there is but few seasons in this state but what we could get a fair yield of honey if we only knew just how to so manipulate our bees so as to secure the best results from them. The seasons are so difficult and changeable it is a difficult problem to solve. The plants that yield our surplus this year will perhaps not yield anything the next, and perhaps some plants or shrub that has not yielded

anything for two or three years will now furnish us a surplus. For an illustration I will say some five or six years ago, in early spring, it became very dry, and a good many of our best honey plants were withering and drying up for want of moisture, and my hopes for a honey crop were at a low ebb, but at about the time my hopes were at their lowest I noticed an unusual stir in the apiary towards the middle of the day, and on investigating I found the bees gathering honey at such a rapid rate that they were falling in front of the hives and tumbling over each other in a way that always brings hope and delight to the real apiarist. The bees were dusted all over with a coarse, yellow pollen that made them look as if they were sprinkled with coarse yellow corn meal. I said to myself, "Now what have you found this dry time that is furnishing all this pollen and honey?" But I didn't study nor wait long, you may be sure, but took up their line of flight and soon discovered the source from which it came. It was being gathered from what is called prickly pear. It is of the cactus family. This plant was blooming and yielding honey in a way I had never before nor since seen, and I secured a fair crop of honey from this source alone. I have also secured honey from other plants as unexpected as that. Now, my dear

reader, there is a cause for all this, and who will help us solve the problem. What is wanted is to know under what conditions of the weather these plants will yield honey one year and none the next. We know that they do this and that there is a cause for it, and that is far as we have got, and to be a bee master in the true sense of the word we should know the cause for all this. I am sure we lack literature on apiculture here in the south. O, how I wish I could induce the editor of this journal to write a book on southern apiculture. We have a host of good books on apiculture and I love and read them all, but they are mostly written and published in the north, and it is difficult to apply their teachings to apiculture here in the south. Now what say you, Mr. Editor?

Rescue, Texas.

L. B. SMITH.

FROM ROUND ROCK.

It is with much pleasure I write to the readers of the Queen once more—we will have the Queen to go to the homes of the bee-keepers of the sunny south. Let us one and all do our best to help this dear old paper along, as it will guide us in the way of bee-keeping here.

We have just passed through the hardest year to the bee-keeper in the State of Texas.

Prospects are bright for a crop this year, so let us all work together. I have just come in from my out-yards, and they are gathering honey faster than I ever saw them at this time of year. People all over the state are preparing for a big crop of honey. I know they are from the way they are buying supplies. Now, when the crop comes let us not push all the honey on the market at once, as it will break it down, and we will have to sell our honey below the cost of production. Ship all out of the state that we can at a good price, so as not to overstock this market.

May this May Queen be a long lived Queen, and may it go to all the bee-keepers in the state of Texas. Wishing you all a prosperous year, I will write more next time.

FRANK L. ATEN.

Round Rock, Texas, May 12, 1903.

FROM NEW MEXICO.

The two queens as premiums that stand over from last year please send them so they will get here about June 1. If I have my choice I would prefer golden Italians. If you haven't that kind send the leather-colored Italians. I see in one of the bee journals that you are going to start up the Southland Queen—if so you can send it right on to me, and I will remit you the subscription price

for a year's time. The season here is a month late, but the outlook for a good crop of honey is splendid. Last year was a hard one here on bee-keepers. It was the worst drouth ever known in this country. My bees wintered well. I lost only one colony out of eighty-seven.

The Guyton boys, from Waco, Texas, are here. They are going to run a big apiary that was lately bought by a Texas man by the name of Hollowood. The parties above mentioned came here for their health. Mr. Hollowood has so improved in health that he has decided to make this his permanent home, and has made heavy investments in real estate. G. H. E.

La Plata, N. M.

FROM FANNIN COUNTY.

I am proud to see the Queen Bee before our bee-keeping friends once more, and I think we need a journal devoted to bees in the sunny south as much as any country or state in the world, so let all of our bee-keeping friends here in the south get hold and shove it to the front, and I will do all I can in getting subscribers and with my pen, as I have been some twenty-five years in the business rearing queens and producing honey, and I think I have learned some of the arts in bee-keeping, and later on I will give some of

my experience with our little pets and my manipulations with the hives and how I put up honey for sale. Best wishes for the Queen and the Atchleys.

R. C. ABERNATHY.

FROM ORCHARD.

When the news was spread
That the Queen was dead,
And interred from public view,
I couldn't see why
You let her die,
And "I had it in for you."
"Till a younger "Quain"
Of the Southland strain
Lit with my mail today.
She looks all right,
So newsy and bright,
And I hope she's come to stay.

I'd like very much to give your readers a slice of my striped experience, but I haven't time tonight, and if I had I'd be too tired and sleepy to write the truth. My bees have been swarming five weeks with no sign of abatement. Really, Brother, I never knew what it was to be busy before. My boys are too small to be of any service, and since my wife got bees in her bonnet and did the contortion act first and outran the Santa Fe limited, I've had all the work about the apiary to do myself. I'd enjoy swarming as much as the bees seem to if the swarms came singly. But when they came boiling out of half a dozen hives at the same instant I feel like "milledaming" the whole

outfit if I am a Methodist.

With a promise to write something for the Queen soon, I'll say good-night.

W. M. GRAY.

[NOTE.—Oh, yes, and some other Methodist has got into it, I see. Well, there was a Methodist near Beeville, I am told, that lost 150 swarms of bees by absconding this season, and I believe you and this other Methodist brother ought to come over and join us Baptists and save your bees, as we can get so much more water on them that they can't fly away. You see, we can plunge them clear under, head and ears, and wet 'em so wet we can hold 'em, as sprinkling is not sufficient in a swarming mania. Come on with that Buckeye Gray article, as being busy won't excuse you.—Ed.]

OUR SCHOOL

BY THE EDITOR.

I received your queen, also catalogue and price list. I am highly pleased with my Albino. She is sure a cracker. I introduced her all O. K. Now I wish to ask you a question. I know it is an awful bother, but I wish you would tell me how the Albinos originated. What cross with the Italians are they? Your catalogue discouraged me a little as to the Albinos being too sleepy, but am going to try them a whirl anyway. The Italians that I had didn't amount to much, that is to my opinion. I think I can get you several queen orders this season. Will order some more myself. Will get you all the orders I can as I appreciate the kindness done me. Also send me a copy of the Southland Queen—may get

you a few subscribers for it. Give me the Albino's pedigree and greatly oblige.

GENE ROGERS.

Mansfield, Mo.

Friend Rogers — The Albino bees are a kind of sport, or a whitish banded bee bred from a darker strain. I can take yellow bees and select the lightest colored to breed from and soon run them into beautiful Albinos, and they will be so fixed in color that it will take a long time to breed them back to the dark race again. There is no true fast color to any race of bees so much fixed that the color will not fade, but the race that comes nearest to being a fast color is the old original black bees, of what are called the black bees of America. They are sometimes called German bees. These bees will vary in color also, from black to brown and a ginger cake color, but if kept pure they never show a yellow band. A nice Albino strain can be had by taking Cyprians or any yellow race and cross them with black bees, then select the yellowest of this cross on for several generations, and you have a fine Albino bee. The Albinos do splendidly for honey gathering.

We desire to establish in connection with our poultry business a bee department, but must confess that we know very little about bees. We have a four-acre orchard which we intend to plow up, and are desirous of knowing what is best to plant on this ground for the bees. If

you can give us any information on the subject it will be greatly appreciated. Our farm is about twenty miles west of Milwaukee.

Also please have the kindness to send what catalogues and printed matter you have on this subject, and what the total cost of an outfit would be. Could you furnish an experienced man for two or three weeks to instruct our poultry superintendent as to how to take care of bees? We should be glad to hear from you fully on this subject, and hope you will give us all the information you can, which will be highly appreciated.

F. A. W. KIECKHEFER.

Milwaukee, Wis.

Friend K.—It would be a great cost to send a man to your place, and then you could not learn a great deal in the short space of two or three weeks. My advice to you would be to get a few colonies of bees, say not more than ten, and study them closely, and at the same time read some good bee journal and other good information that can be gathered from A. B. C. of Bee Culture, the Jennie Atchley Company's catalogue (free) and then after one season you can enlarge your business. However, if you wish to start largely right at the beginning, better get an experienced bee man to work in connection with your poultry man. It would cost you about \$100 to start with ten full colonies, say \$6 each and \$40 in supplies, and the bees should pay back a good portion of this sum the first season if you have a good

location and a practical bee man to manage the bees.

Mr. L. B. Smith, of Rescue, Lampasas County, Texas, sent me a sample copy of the Southland Queen, which I have read with much interest. I kept bees on a small scale in Arkansas four years and had good success with them; sold as high as \$12 worth of honey from a single colony. Of course this is nothing so very great. However, at that rate a man could make considerable money if he had as many as he could manage. Now, Mr. Atchley, as I am an enthusiast when it comes to bees, I would like to go where I could embark in the business and count on a good yield every year. As soon as I become settled I will subscribe for the Southland Queen. WM. HITCHCOCK.

De Leon, Texas.

Friend H.—I could point you to several good locations. Around Beeville is not a good place for honey. Our bees are kept from fifteen to thirty miles from Beeville, in order to get into the hills and brush, where bees do reasonably well every year. The territory near Beeville, or for 30 miles is pretty well stocked, but up the Nueces river fifty to a hundred miles is splendid unoccupied range for bees. If you desire to move to better territory I would advise you to take a wagon and travel over the country that lies near the Nueces river from Cotulla to Beeville and you can find splendid locations. Any help I can be to you or others in getting good locations command me. All

information will be given in Our School in this paper, and will appreciate your support.

I am a bee-keeper. I keep the native bees, but they do not do very well. I would like to get five-banded bees or Carniolans. I am sending for a few from you; would send for more but I don't know whether southern bees will do so well so far north or if they will live through the winter. Will you please give me your opinion as to whether it would pay me to get bees from you or from anywhere in the south?

F. BARKER.

Friend Barker—The question of bees and queens from the south doing well in northern states has been up many times before, and it has been decided that there is no difference as to where the queens are raised, and southern bees do as well in northern countries as bees reared in the north. The imported Italians are reared in a country (Italy) similar in climate to south Texas, and no one hesitates in buying queens from Italy to improve their bees, and I am well satisfied that queens and bees reared in the south do as well in New York or any other northern state as bees and queens reared in these cold winter states. Who has tried this? Let us have more proof?

I have about 200 colonies and intend to double this year if possible. Would like to have your opinion on Holylands and Carniolans. Can you agree with H.

H. Hyde, on page 338-339, Gleanings, that they are not such excessive swarmers, if given plenty of breeding room. He says, "they are less inclined to swarm than Italians if you will give the queens room and the bees room to store their honey." Don't you think he has put that rather strong. If what he says of them is true they are the bees for me. Our honey season lasts from May until October, and this year strong colonies have stored surplus all through April.

L. B. BELL.

Friend Bell—I must say that Brother Hyde is mistaken in the main, as Carniolans are the worst swarmers extant, and the Holylands next. Giving room cuts no figure with Carniolans if field conditions are right, the supply of honey and pollen being the main cause of excessive swarming. When there is an abundance of pollen and just honey enough with it to support the colonies there will be swarming, and the Carniolans are first to catch the fever. I have the best strain of Carniolans now that I have ever seen in all my experience, and the gentlest bees I have ever handled and they are great honey gatherers. The start was had by an old imported queen being superseded and the young queen mated to drones of her own colony, and such bees I have never seen, and I have no queens to sell of this strain yet.

I received your valued catalogue and Southland Queen united last evening;

was proud of them, and found them to be the best bee literature I have read and find them full of the most valuable information. I am starting an apiary and expect to follow bee culture as a business. As you are an experienced bee man I want to ask a favor. Please send me a pamphlet on anything. Please tell me which is the best of the six kinds of queens you raise. I have many catalogues of different breeders, and find that those who keep the Carniolans recommend them very highly. Are they a distinct strain of Italians or are they a different kind altogether? Are they as large and as good honey gatherers as the Italians? Can they get honey out of red clover if the same should yield. My bees are a mixture of Italians and blacks except one colony, which is black, and I wish to get another kind. EDWARD MELLOTT.

Locust Grove, Pa.

Friend M.—I am yet undecided which is the best race of bees we breed, but am leaning to the opinion that the Cyprians for South Texas is the best all-round bees. If I were going to stock another yard for honey and best results I would catch a cross from Cyprians, Holylands and Carniolans, and I would have no fears in being armed with bees that would take care of all the honey that could be secured by any bees in the world. Then a proper selection in breeding these bees brings a docile strain and a very hardy race of bees. The Carniolans are not a fixed race of bees, or at least this is my experience, as you may place a yard of imported Carniolan bees where there is no chance for them

to mix with other bees, and they will all be yellow-banded bees before two seasons pass, or a portion of each colony be bees with yellow bands. The bands are of a more reddish color than Italians, and I have my doubts about there being any Italian blood about their yellow bands, but they may be still pure Carniolans, but the point I started out to make was that the Carniolans are not fixed in color. You will find them good bees for honey gathering and quick to enter the supers, and I am satisfied they can extract the nectar from red clover.

Please send me a sample copy of the Southland Queen; if it is anything like it was before I want it. The premium queen you sent me during the summer of 1901 has given me perfect satisfaction, and out of queens from five leading breeders I think that I should prefer her to any of the others. This season they did not swarm, and as I wanted some young queens from her, I removed her from her colony some ten days ago and made a new colony for her to reign in and left her old home to build cells. Today I opened the hive, thinking that I would divide the colony and rear the queens, when to my delight I found a young queen which had just started laying. They had decided to supersede her. Now I want to rear as many more queens from her as possible. Please let me know if you think the plan I suggest is the right one to follow. I shall build up the old queen's colony strong by giving plenty of sealed brood, and as they build cells I will remove them as soon as sealed and put in a nucleus to hatch.

Please answer me the following: Will her bees try constantly to supersede her? Will they build more than one cell at a time? Is once a week often enough to look into the hive to see if there are cells. If you have anything to suggest please do so.

J. A. WISE.

Hazlehurst, Miss.

Your plan will work all right, and once a week is often enough to remove capped cells. Yes, the bees will constantly try to supersede her, and will sometimes build three or four cells, but should you continually keep the cells out your old queen will disappear and leave your colony queenless. You can sometimes get 20 to 30 fine cells from a colony that is trying to supersede their old queen. The queens you get by this plan will be equal to natural swarm queens, or any other kind, and it is a very easy way to get queens to requeen with.

I now have two hives of bees, one a new swarm from the parent hive. The original or first hive was a present, and in a box hive. I wish to transfer them as soon as I can get hives. I think there are bees enough in the box for two eight-frame hives. The first hive will contain enough bees at the time the swarm is partially driven from the old hive, and then when the brood hatches and matures in 21 days there will be enough for the second hive. Now I will need a queen for that last hive. I will also want queens for the other two hives later on so I can have all Italians. Still this country is full of black and black brown bees. In transferring I will have some very dark honey. Now I wish you

to tell me if there is any way that dark honey can be fed back to the bees and they store it and it will be bright and clear. Is there any process by which it can be cleared of the dark color before it is given back to the bees? Could this dark honey be cleared up to a light color and flavored, say with lemon or orange or with any flavoring that would make the honey palatable to the taste and beautiful to the eye.

N. B. GRAVES.

Malden, Mo.

Friend G.—Your questions are quite puzzling and rather new ones. If there is any way to clear honey, or to make dark honey white I have not found it. I have made fair-colored honey out of dark honey by mixing it with very clear honey, and the mixture be a pretty golden hue, and this does very well when both honeys are of good flavor. It will not do to mix honey of bad flavor, bitter, peppery or sour, with good flavored honey, as the whole would be ruined as to taste, especially if any great per cent of the bad-flavored honey were mixed with the good, as the off flavor seems to predominate. I never tried to flavor honey to make it palatable, but it might be done and be no great objection, but I doubt if it would pay or be best to do so. Better keep your dark honey and feed to your bees to winter on.

A colony is in best condition to raise queen cells in from one to four hours after being made queenless and broodless.

SHOOK SWARMS A LA TRANSFERRED SWARMS.

GEO. ROCKENBAUGH IN "PROGRESSIVE."

This shook or brushed swarm business in the different journals is getting strenuous a la Teddy. Let us take a retrospective view of what has been said, written or practiced in theory concerning the shook brush article or what I call in spite of your grammatical rules, transferred swarms.

In the last three months I have noticed no less than forty different articles on shook swarms, and yet some of the writers are totally in the dark if those would be schemes are going to work wonders with them next season or not.

Barnett Taylor's largest crop of comb honey in one season was 26,000 pounds; my largest was 18,000 pounds of comb honey. Most of this said honey of Mr. Taylors' was produced by transferred swarms, and my crop, every pound of it, was taken by the transferred system.

Now, this crop may sound like a theory to some of you would-be bee-keepers. The Rambler said, "Hold your breath untill I get through talking, and then you may spout law all day."

See back number of Review concerning Taylor's large crops. See bee department in Farm, Stock and Home of Minneapolis, of 1892.

93-94, edited by B. Taylor, and note what has been written in regard to the production of large crops of comb honey by the transferred system.

At our 1893 World's Fair meeting with Dr. Miller in the chair, the question, "What is the best hive for the production of comb honey, viz extracted." Several letters were read by different members on the subject of hives and discussions followed. "Come to order now. All those in favor of the eight-frame hive will please stand up." Eighty-seven arose. "Now all in favor of the ten-frame hive will please stand up." Two hundred and forty arose. "Now all those in favor of the Heddon or double brood chamber, rise." Prof. Cook, B. Taylor, seven others and myself arose. I used the Heddon exclusively at that time, and would have no other in the production of comb honey on any part of the globe.

An ordinary bee-keeper that has been in the business for a number of years will tell you that when a colony gets to a certain strength, that is, after the white clover has been in bloom some twelve or fourteen days, every colony that was in good condition will have one super half to three-fourths full. But now comes the critical condition. After said super is nearly full, the colony will begin to loaf for a week before they swarm,

and this same week is lost if we wait for a natural swarm; henceforth be wise and transfer when the super is half full. Some apiarists will tell you that every colony will act differently from all others. Nonsense. The bees must be controlled and do that which we wish a la Aiken. Providing you have the bees and there is any nectar in the field, shook swarms will work with the same whim as the natural swarm, and doubling that of a loafing old colony with a lot of worthless brood after the flow is over.

My method is as follows: The colonies are grouped in pairs to begin with in the spring. Colonies No. 1 and colonies No. 2 stand side by side. Spread them about eighteen inches and place a bottom board with a Heddon half super or hive between the two hives and place seven shallow frames with one-half inch starter in it. Now go to colony No. 1 and pry off the super, but do not take the cover off the super. Use very little smoke; next find the queen and place her with the frame of brood she is on in the newly formed hive with three of the empty frames on one side and four on the other. Now take from the same colony two more frames that contain no brood and place one on each side of the empty frames and your brood chamber is complete. Place an empty super containing only

starters in the sections or a starter on all four sides of the section on this newly-formed colony. Take the cover off the other super and place it on the empty super, and the super from colony No. 2 on those other two supers. Now cover the hives of the newly formed hive with a thin board with a $\frac{3}{8}$ -inch rim to make it look like an escape board a la Porter. Cut an entrance in this escape board by cutting out two inches of the rim in the front end. Now bore a one-inch hole through the board, one inch from the two-inch rim entrance.

Kill the queen from colony No. 2 and set it on this board, bottom board removed, and also the body with the brood and bees from colony No. 1 on to this, cover it up and you are finished. You will now have shot tower hives a la France. Work is now going on in the supers in double time hip hip, and the colony is gaining in strength daily.

Fifteen days later in transferring the two brood stories should be taken off and placed beside the parent colony. Eight days later reduce down to twenty frames, give them a strip of eggs as per Alley, and you will have a number of queens 25 per cent superior to those reared under the swarming impulse. Two weeks after the eggs are given, kill the queen in the old colony, give half of the

brood to the parent colony that has the capped cells, and at the same time give the old colony two cells from this parent colony protected a la West. You will now have your whole apiary requeened, which is very essential in the shook swarm system.

This annual requeening was followed by a hot discussion at our 1893 World's Fair meeting. I held my ground and came out victorious. I well remember Abbott, Aiken, Yoacum, B. Taylor and myself were grouped together after one of the sessions, discussing this annual requeening.

Dadant, jr., spoke at this meeting: "We produced eighty pounds of honey one year and our queens ranged from one to four years old. No, we never requeen; bees will always supersede the queens as readily." It was very trying to convince the majority at this meeting; at last B. Taylor gave in by saying, "You are right. I think the honor belongs to me in advocating annual requeening so strenuously in the production of comb honey, as I have practiced it longer than any writer that I know of. I gave my methods of the transferred system to the Philadelphia Bee Keepers' Association some three years ago. Some of the members tried it but made a slop-over. This shook swarm paper will eradicate the foul brood in the states in time, but how about

Cuba. See page 515, June 10, Gleanings, also 849, October number, H. Howe: I have made several hundred this year, and am still shaking. Quinine no good for Howe and his miasmatic hospital apiary. McVoy starvation cure no cure. Why not try the slappy on Harry and Mc.

Any bee-keeper who goes to an apiary and tries to shake fifty colonies will find that the robbers will run him from the field before he finishes ten colonies. Why not use my plan and do away with the shaking? Harry Howe will bear me out in this, as I had three years' experience in Cuba myself. When all is said and done, what advance have we made in this shook swarm system? Is not the Heddon drive and transfer system one and the same thing?

In 1895 I met an extensive apiarist in St. Louis, hailing from Loveland, Colorado. As he had just shipped his crop of comb honey, consisting of a full car or 50,000 pounds, the commission merchant advanced him \$35,000. This same party told me that nearly one-half of his crop was produced by the shook swarm plan. See page 893, November number of Gleanings, where the editor says that Mr. Stacklehausen is evidently the pioneer in the forced or shook swarm idea. Let me refer you to back numbers of Review of some ten years ago, and note what has

been written by B. Taylor and the shallow frames. Yes, B. Taylor used those shallow frames ten years before the Heddon hive was patented. Just so with the shook swarm. Taylor procured large crops when our Texas friend's idea was still in the cradle. I myself took a large crop of comb honey with the transferred system in 1889, securing on an average of 180 pounds from a large apiary. If Mr. Stacklehausen claims to be champion pioneer of the shook swarm method, I will lock up my limburger against him forever.

I overhauled a number of Danz. hives last summer for a friend of mine, and they are the worst lot of hives I ever manipulated, identical with a Cuban log gum. Why, say, you could ship a set of ten frames, without hive body or tying them together either, and beside the hive is not deep enough for outside wintering in the middle states, unless using two for a brood chamber.

One word more, Mr. Editor. I have traveled every inch of Cuba, both by rail and saddle. Have visited some 300 Cuban apiaries, large and small, and nearly all of the few American apiaries, and I discovered foul brood in all of them. Yes, I will swear that I could not find one log or frame hive that was not rotten with disease. Mr. Editor, I have just read in some paper that a large number

of hives shipped south to a large island for the rearing of early queens to be mailed to this country. Why do we employ foul brood inspectors in New York, Wisconsin and some of the western states and then via versa import queens from an island that we know is rotten with disease. If any of you readers don't have the courage to call me a liar, call around when I am hammering away at the typewriter and split my head open with a boot-jack a la R.

Camden, Mo.

"What nice bread this is. Mr. John's baker's bread, is it not?" "No, I make all my own bread." "What yeast do you use?" A half cupful of honey, a pinch of tartaric acid, a little flour and some water. I prefer dark honey for it." "Well, I would not wish for better bread." In the dry weather bread made with honey yeast does not get so dry as bread made with other yeast. In the United States the large bakers are the greatest honey buyers. — Australian Bee Bulletin.

A Brazilian bee-keeper has invented a honey extractor by which the honey from both sides of a comb may be thrown out at one operation. — Ex.

A solar wax extractor may be used to liquefy honey in small glass or tin receptacles.

THE SOUTHLAND QUEEN.

PUBLISHED MONTHLY.

E. J. ATCHLEY - - Editor and Publisher.

Application made for transmission through the mails as second-class matter.

BEEVILLE, TEXAS, MAY, 1903.

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Beeswax has been scarcer this season than ever before, and foundation is higher than I can ever remember.

Please remember that after the next issue—the third one—this paper will only go to regular subscribers, either the old or new ones, and all other papers sent out will be samples. If you do not report by June 15th how much we are due you on subscriptions we will drop the matter.

Now, friends, don't wait a day after you get the Queen till you send in your articles and news notes, as it is so pleasant and nice, as well as profitable to have matters so arranged that we can hear from each other once a month and have a medium through which we can all have our say and be more closely linked together as one common brotherhood.

I regret that the Queen was late last month, and also this. The paper lay in the postoffice a long time at Beeville pending investigation as to her right to fly at pound rates, and finally she was ordered out upon trial, and this month will be late also, but I am satisfied that the June number will go out on time, which is on the 15th of the month. I am going to try and have the paper mailed on the 15th of the month to a day, in order that she may reach her readers with great regularity, which is a fine thing for any paper.

This has been one great spring in south Texas. The good rains last winter and up to the present time have made vegetation put on such a wonderful growth that the whole country has been a flower park, and even the public highways are white with blooming plants. Bees have lost no time to improve the opportunity and most apiaries have done well. I have

been more busy since the Queen started this time than ever before that I can remember, and when I get through harvesting honey, which will be about August 1, I am going to put more life in the paper, and make her thirty-two pages and brim full of good, original matter.

It is a great loss to bee-keepers to allow drone combs in the brood nest, in south Texas, as the working force is so much reduced by the drone combs occupying space where worker combs should be. Then, drones in such abundance are consumers to the tune of several dollars in large apiaries. You can use your drone combs in the supers, after a honey flow has begun, and get good use of them, as drone comb is natural store room for the bees anyway. The natural course of a colony of bees is to rear drones in spring, and when the flow comes fill up and seal over the honey for winter, and then next spring use out the honey and rear drones again, etc., but it is a big loss to the bee-keeper to allow this thing to be carried on to excess. If your combs are only part drone, you can cut out the drone cells and have worker cells built in their stead by placing them in colonies with virgin queens, or where there is young laying queens.

Some have been talking about a South Texas bee meeting and

we will try to call one about September 15th, as I am president and W. H. Laws secretary, elected at the last meeting of the South Texas, which was to have met at Beeville last September, which failed for lack of interest on account of the drouth which prevailed over this country all last season, but as the present season has been to the reverse of the last and has brought out new bee-keepers by the score right among us, we will have a bee-meeting this coming September. The day and date will be given in the June, July and August queen. Everybody must go, and much good will be the result. We will have Mr. Laws and others get out a programme, which will be given in time to be considered by all that desire to attend. The meeting will be held in the court house in Beeville.

I have just received the following sad news from my old time friend and brother bee-keeper, S. F. Trego. The letter was a personal one, but I desire to say a word about this sad and unfortunate occurrence, and the personal letter will speak such consoling language that it may help some other dear couple to live happier. Let us all extend Bro. Trego our heartfelt sympathy in his great loss. Here is his letter:

Swedonia, Ills., May 16, 1903.

Mr. E. J. Atchley, Beeville, Tex.:

Dear Sir and Friend—Vol. 1 No. 1 of the Southland Queen is here, and is very

well gotten up. Prospects for honey are extra good, but I am behind with my bee work. My Dear Queen left me and passed to the better land April 15, 1903. She left me four sweet children to comfort me in my great sorrow and trouble. My children range from nine days to nine years of age—two boys and two girls. Our married life was unusually happy. She never spoke an unkind word to me in her nine years as my true and loving wife. A good-bye and a kiss was always our parting words. Oh, I feel so sad and lonesome, but my great consolation is, that I will meet her soon. I employed the best medical skill obtainable, but blood poison proved a conquerer. She was patient and loving to the last. As ever your friend,
S. H. TREGO.

WORK AMONG THE ATCHLEY APIARIES.

— — —
This month we are harvesting honey, and we travel from one apiary to another with our portable honey house on a two horse wagon. Our crew consists of five persons. The writer, E. J. Atchley, works the hives, selects and takes out all the honey. Will McDowell, the colored man and cook, carries the honey in comb buckets from hives to honey house and returns the empties. Ives and Thomas Atchley take their turns about uncapping and extracting honey, and Santos, the Mexican, puts in foundation. Taking honey is not all the work that is done while harvest is going on. I usually carry in my box, on which I sit and work, a lot

of the best young laying queens to be had from the nuclei that are run for queen-rearing at each apiary, and when a colony is found whose queen is not what she ought to be I supersede her with a new one; see that all combs are straight; remove all drone combs from the brood nest, and try to have each colony left, as I pass over them, so as to be a pleasure to the eye of a good apiarist.

Any nuclei that have built up and filled their three frames well are placed in ten-framed brood chambers, given frames and foundation, and soon many good, young and thrifty colonies are added to each yard, and if not wanted at present locations, are hauled to new apiaries as we pass to and from the bee yards. I usually proceed to cage all the laying queens in the rather weak nuclei before we begin taking honey, else the disturbance excites them, and the little robbing that usually occurs by returning extracting combs, causes them to swarm out, and if not lost these little swarms make more trouble and bother than they are worth to look after them, and by caging the queens all this trouble can be avoided before operations are begun. Wagons are on the road all the time, hauling honey into Beeville and supplies, honey cans, etc., back to the apiaries all through harvest time, which is about three months, April,

May and June. After we finish up a yard, and have taken all the honey, we then pack it for market (usually bulk comb), clean up the honey house, sack up the cappings after they have drained almost clean of honey, down through the strainer of a Dadant uncapping can; wash up all honey strainers and arrange everything for the next yard. We now have twelve apiaries, and it takes us about four weeks to make the rounds of all of them, so the first begun on have good time to be filled and ready to harvest again, and we usually take three times from each yard, more or less, as the seasons and honey-flows give us. We make the rounds just the same whether we get much or little honey. We are averaging this round (May) about twelve hundred pounds per day, or ten cases of 120 pounds each. With our force we could take twice that amount, but the other work takes a portion of our time, and then we get enough work to take our time, as the harvesting job is not as soft and easy as to talk about.

In connection with the work outlined above we have this month caged over 500 queens and mailed them, boxed and crated for shipment 200 one, two and three frame nuclei, which have been hauled into Beeville and sent to distant states. Also some full colonies have been shipped to Chicago,

Ill., and Mexico. After heading all the processions in the above I have found three bee trees this month, two of them just sixteen steps apart, gathered wild currants for pies, getting up copy for the Queen and answering up a portion of our correspondence over the phone. What Mrs. A. and her factory crew at Beeville have done, and how she has managed the mails, and run her queen-rearing yard at home, I have not time nor space to tell you this month, but I expect they are busy, too.

FERTILIZATION OF QUEENS IN CONFINEMENT.

R. F. HOLTERMAN IN GLEANINGS.

Since writing my last article on the above subject I have been in the province of Quebec for the government institute meetings. Other matters have kept me very busy, hence the delay in following up the subject as suggested by you. I wrote Mr. Rowson privately for further information. The following bears upon the subject in hand, and is a reply to my letter for further particulars. The letter is dated February 9th:

"In reply to your favor of February 7th I may say that I did not experiment with the fertilization of queens during the past season, as I was busy during the swarming season. This method of fertilization did not originate with

me. I heard of it from a Mr. Inksetter, a farmer near Ancaster, who is sawing up a bush three miles north of here. He was ill all one summer and amused himself with queens and drones in this way with, so he says, complete success. I do not clip queens, but as I saw coition take place in the carboy, and laying follow, I came to the conclusion that the fertilization occurred in the carboy."

Now for a startling experience which I heard from a bee-keeper, Mr. A. B. Comstock, Sherwood, New York. Last summer he was inspecting a particularly fine colony and found a number of queen cells just hatching. He removed the hatching queen-cells, intending to dispose of them as soon as he was through with the colony in hand. This took considerable time, and when he returned to the bunch of cells there was just one hatching cell left. He took the queen out of this, caged her under an old-fashioned wire cloth cage, the ends frayed and bent down into the comb. It was about four inches square. Under the cage was some hatching brood, drone and worker; he also caged two or three drones with the queen. Owing to the rush of the season it was some sixteen days before he remembered the queen. Upon inspecting the cage he found the queen alive and having laid in the worker cells. One drone was dead

in the cage. He cut a hole from the other side of the comb into the cage, out of which the queen and bees passed into the hive. The queen proved to be an excellent one, but to his surprise the eggs deposited by the queen under the cage produced worker bees.

I cannot help connecting the demijohn experiment and this. Our friend Comstock's method, if successful, would be very simple, as comparatively little time or expense would be involved. Many may try it this summer.

Now, as to my experiment. Lack of time was the trouble with me. I could not watch the tent as closely as I should like to. In these cases the government should step in, and let us hope that the Department of Agriculture at Washington will receive at least \$20,000 a year to carry on investigations. You will notice I attributed my failure to the nuclei with queens being between the tent and the large apiary, the noise of flying bees and drones drawing them to the perforated metal entrance. By putting the nuclei on the other side of the fertilizing tent the position in this respect would be reversed. This point I saw before last season closed; but my large buckwheat harvest prevented undertaking any more at the time.

At Syracuse Mr. F. H. Cyrenius, Oswego, stated he thought he could help me in preventing the

queen from trying to get through the entrance through which the bees were flying, and kindly invited me to Oswego. Gladly availing myself of the invitation, to Oswego I went. He for another purpose shades this entrance through which worker bees fly, and throws all the light he can on the entrance to which he wishes to invite the queen. Now, I did not do this; in fact, the queen had not only to pass through a $\frac{7}{8}$ -inch-wide hole in a $\frac{3}{4}$ -inch-thick board at the rear of the nucleus, but through a hole of similar width in a $\frac{7}{8}$ -inch-thick board fence.

In the above I have given every thought I have upon the reason of my failure, and the remedy. It is, perhaps, with a little reluctance, but having gone so far, it is only natural to desire to crown the effort with success. Yet I hope many will try these experiments. Many can try the first and second, and a few the larger. All that I ask is, as success crowns the effort, it shall be reported in *Gleanings*. Of course should Prof. Benton try these experiments it will have to be published through the regular channels.

Brantford, Ont.

[These reports are interesting and valuable, but they are so contrary to the experience of others that we are almost inclined to put an interrogation mark after them.

Is it possible that Mr. Rowsome, Mr. Inksetter and Mr. Comstock could each have been mistaken in what each saw or thought he saw? Did fertilization actually take place in the carboy, or something which looked very much like it? The experience of Mr. Comstock seems to leave no doubt, if he is a man of veracity and experience, that the queen taken from the cell was actually fertilized by the drone found dead in the cage with her. The fact that there were eggs in the comb that she herself laid, and that these same eggs developed worker bees, seems to indicate that coition had actually taken place; but even if it had, I should be more inclined to think that the general rule that queens must be fertilized in the open air still holds true. Nature sometimes makes a deviation from the general laws laid down for her; and it is possible that she did so in the case reported. If so, it would be a new fact to us that queens may be fertilized in confinement in rare instances; and it is possible that there are conditions under which fertilization could be made a success when both the drone and the queen are confined. There is food for thought here, and an opportunity for experiment, and with Mr. Holtermann I sincerely hope the United States government can at some time, if not in the immediate future, conduct some experiments

that will give us a little light on this question. As it is, I commend this article to the consideration of Prof. Frank Benton at Washington, and Mr. Wm. Newell, of College Station, Texas, and other stations where apicultural experiments are being conducted.—Ed]

Grace Cell Compressor

A handy little machine for quickly forming wax cups by pressure for queen rearing by the Swarthmore plan. Queen cells will be constructed from these cups fully equal to the natural kind.

Each cell can then be separately removed for examination, caging or placing in nuclei, without lifting combs or opening the hive. The cups will last for years, and can be grafted over and over with increasing success. Used and highly recommended by many well known apiarists.

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For receiving the started Queen cells in full colonies (containing a laying queen) for completion, incubation, hatching or confining a number of virgins until they can be introduced to nuclei. By the use of this cage cells may be placed directly in the midst of the brood chamber in such convenient position that the cells may be removed without opening the hive proper or in any way disturbing the bees, thus saving much time, labor and excitement.

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1 cage, complete, cells compressed
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ing frame.....1 00
6 cages in flat, blank shells included.2 50

E. L. PRATT,

Swarthmore, Pa.

Advertisers' Editorial Page.

N. B.—A page under this heading will be open to our advertisers, and they will be allowed to make—free of charge—any announcement of special importance to their customers, such as change of prices, reference to regular ad, arrival of new goods, etc.

San Antonio, Texas, May 16, 1903.

Mr. E. J. Atchley:

DEAR SIR—Please state in the next issue of the Queen, in the advertisers' column, that I now have a big supply of foundation and nearly caught up with orders, so can give prompt service again.

THE A. I. ROOT COMPANY,
Per Udo Toepperwein.

Attention is called to the advertisement of the Rocky Mountain Bee Journal, published at Boulder, Colorado. Monthly at 50 cents a year.

Chas. Dadant & Son, the foundation makers of Hamilton, Ill., have placed an ad for a year. Those who have never used this foundation would do well to give it a trial.

T. F. Bingham, of Farwell, Mich., advertises his "smoke wagons" in this issue. These smokers are used everywhere, and are considered the best.

Will Atchley, Beeville, Texas, breeds all the different races of queens, and places a guarantee upon every one sent out. He produces, buys and sells honey.

THE LAST COLONY.

All the fools are not dead yet, but my bees are. It has been more than a year since we had to give up our last colony, but "hubby" and I are in mourning for them yet. It's a downright, dirty shame, the way in which we lost them all, so I will just tell you all about it and how it happened.

When we left Texas—the land of flowers—to come to this God-forsaken Indian Territory, another land of flowers, we only had nine colonies to bring with us. But those nine had all grown out of one in two years, and we—hubby and I—were very proud of them, and fearing we might not find any bees in the new country, we could not think of leaving them behind, for hubby always says, "we can't get along without a few bees." So we were fool enough to ship them in the covered cars to this wretched place, where the people never saw or heard of a bee. No, I'll take that back, there was one fool that had seen a bee, but it seems that he had been impressed with the wrong end of it. Anyhow, his memory had not retained a very favorable impression of this industrious little friend of ours and now he shuns them like some everlasting plague. Though, no doubt, he learned a lesson that only experience, with the help of the bee, could have ever taught him.

The bees were all secured in their hives and packed in a car with the rest of the household plunder, and when they arrived at the Chickasha freight depot this fool I speak of, with several others, broke into the car—"Meddlesome Matties" like—to see what they could see, when about the first thing they stumbled upon was a hive of bees, but they did not know that it was bees, else they would have been more careful how they stumbled over them, knocking the covers loose. Each armed with a railroad spike and a good stout heel attached to the pair of cowhides they wore on their feet, they made short work of "opening up those pretty little play houses" to see what they contained. Now, imagine what surprise and chagrin they met with our much treasured little pets. It was a beautiful, warm day in December, and after being caged up in their homes for two weeks of course they wanted out. They got in a hurry, too, making as much noise as at any time after an April shower. "Holy St. Patrick Henry!" exclaims one with much emphasis, as one bright coated little fellow greeted him on the end of his nose with a "holy kiss." "Faith and bejabbers but she kisses hard for a young bumble-bae," he continued, as he threw his arms and feet about promiscuously, causing the bees to gather after him for all the fun there was

in it, and in less than a minute they were swarming out at every crack and crevice of the whole nine hives, greeting the whole party of Meddlesome Matties with the warmest welcome possible. "What are those dadblasted things, anyhow?" yelled one, as he leaped out at the door.

"Howly Mither! O'm thinkin' it's the Divil's own dearly beloved angels!" shouted another "Paddy," as he hastened to follow the example of his pard, not escaping a few stings as he made his exit.

"Who ever saw so many horseflies in one nest?" said one, who, up to the present, had not been noticed by the little warriors, but he had scarcely said the word until he received particular attention, which caused him to seek a hiding place forthwith.

"Ge whillikins, boys!" shrieked another who, up to now, had stood as one paralyzed, and whose senses seemed suddenly to return, but proved not slow in making use of them. "It's bees!" as he went leaping and lunging, knocking against pieces of furniture until he brought up against the door facing with horror written on every feature. Nor did he stop at the door, but those few words, spoken in such a manner left an impression on the rest of the crew, causing a general stampede. Where they stopped at—well, I hope I shall not be questioned too closely

about where they found themselves next, for I only have the boys' word for it that came in the car with the plunder, and who was also an eye-witness to the whole proceedings of those rounding Irishmen, while stationed himself at a safe distance, watching their movements with much satisfaction. I had the whole story from him, though told with many more ejaculations and words not used in Sunday school than I have repeated, but as he is a lover of the truth we have no cause to doubt his veracity. He positively asserts that the last he saw of them was through a field glass, as they entered Pocassett, a little station on the Rock Island railroad nine miles north of Chickasha. Well, the bees were all out and not knowing what else to do, the boy went straightaway in search of Webb, and in as few words as possible told him what had happened. When my poor old hubby arrived on the scene of disaster he was met by a policeman, who came creeping out from behind a stock of baggage piled upon the depot platform, and who, by the way, was the only living object to be seen in a radius of three blocks of the deserted car—presented orders from the company that "if he did not clear that car of those—(here he used a lot of railroad talk)—and everything else it possessed, he would have him in the

lock-up inside of two hours." Things had, indeed, begun to look frightful, but he went on to the car to see what could be done in two hours. Scarcely a colony contained a handful of bees, though all the queens were living. This extra warm day, as every one knows, is but the forerunner of a blizzard, and knowing that it was useless to expect all of the bees back into their hives before night, he went to work with a will. Not having such a thing as a queen cage handy he killed them all but one, and swept all the bees he found into one hive, closed them up tightly and went out to seek our traveling companions and solicit their aid in unloading the car, as a lot of the property it contained belonged to them, so in a very short time they had dumped our camp outfits into the middle of the wagon yard, and four empty wagons went rattling off towards the car. At the end of the two hours the last load was well out, and on its way to join the camping outfits in the middle of the feed yard. That night the blizzard came in the shape of a snow storm and cold wave, freezing our one poor little colony of bees till they were diminished to not a good handful, but we managed to keep them till March, and they were doing quite well, when one day the tall dead grass caught fire and burned into ashes our last colony

of bees, for it happened when we were not near enough to them to save them, and the man in whose care we had left them had forgotten all about them until they were on fire, and quite past redemption. "Well, we have been silently mourning for them ever since, but I heard of a man, a very wonderful man, that was brave enough to keep bees, and not many Sundays ago hubby and I visited him—a rank stranger—to look at his bees. We found him with twenty-three full colonies, all in good shape and ready to swarm. Friend Linzy was not found napping, for he showed us a new copy of *Gleanings*, the *Progressive* and a sample copy of the *Southland Queen*, and had just that day returned from a bee convention, held at Greenville, Texas, and had everything in ship shape for the coming season. Since then my poor old hubby's bee fever has run up 99 degrees higher than it ever was before. Now, while the band is playing "There'll Be a Hot Time in the Old Town Tonight," I will simply say more anon.

J. A. WEBB.

Chickasha, I. T.

FULL SHEETS VS. STARTERS IN THE BROOD NEST.

M. A. GILL IN GLEANINGS.

Mr. W. K. Morrison's strong stand against starters in place of full sheets of foundation or drawn combs for the brood nest plainly

shows again that different localities need different methods, as none of us would dare to criticise Mr. Morrison's judgment in the different fields where he has practiced. But after using starters only for years I can not but think that their use is the proper thing here in Colorado. It is a fact patent to all, I think, that a colony that is building a set of combs in the brood-nest, and that has at the same time ample storage room in the super, has all desire to swarm removed, and the necessity for rapid comb-building for storage purposes removed, and that the desire for workers in such a colony is paramount. Hence nearly all the comb that is built by the bees and immediately occupied by the queen, is built worker size, whether the queen be one month or three years old.

But to secure these conditions everything must be normal. The colony must have a laying queen and an ample field force at the time they are hived, whether the swarm is forced or natural. Again, it is necessary to have a steady flow of honey; but these conditions nearly always prevail at such time in Colorado.

Any condition that will retard rapid comb-building like an old queen with a good force of young bees and a small field force, or a colony that has been given a frame or two of brood to help them, let

it be large or small, that is compelled to raise a queen, will invariably construct much drone comb.

But I think it is still safe and advisable here in Colorado, where our swarming season does not stammer along through the year as in Oriental countries, but is nearly all done in twenty days after the honey-flow begins, to continue the use of starters only in the brood-nest; and our reward will be a crop of the most beautiful surplus honey that can be raised, and brood-chambers filled, with none too much drone comb, as hundreds of my own and others' hives will attest.

In your April 1st issue you say to a correspondent that it is not safe to feed good heavy syrup in the open air. I wish to relate a little experience I had with open-air feeding last fall. I had sixty forced swarms that I moved to a comparatively isolated location, and on examination, about September 20th, I found them short of stores. As you know, my covers will hold liquid like a tin pan. I inverted them on the hives, and used them as feeders, first filling them with excelsior, then pouring the syrup right into the excelsior. I made the syrup by taking 75 pounds of water to 100 pounds of sugar, and letting it just come to a boil. This would, perhaps, leave about 165 pounds of syrup to 100

pounds of sugar used. I fed them this amount at a feed by pouring, say, eight pounds each in twenty covers scattered about the apiary. The feeding was done from 2 p. m. to 3, and all entrances were left full size.

I continued this three times each week, until I had fed this apiary about 160 pounds of syrup, realizing that much would be consumed in brood-rearing on account of the continued feeding. When I quilted them for winter, November 1, I found them in prime condition, and on April 1, 1903, found them still in prime condition, and all of them alive, fifty-nine of them with queens laying. The feed cost about 75 cents per colony. I fed altogether to my bees over forty 100 pound sacks of sugar made into syrup; but in all other apiaries I was compelled to feed inside the hives on account of the neighbors' bees.

Of course, in the apiary first mentioned some colonies got more than others, as is the case in any honey flow; but all got some, and enough, while some that needed it were skipped by the plan of individual feeding; hence the best results were obtained by the open-air plan. Is there anything more successful than success? People living where it is rainy, cool and cloudy during October must not confound these conditions with ours here in Colorado, where it is

sunny and dry and hot during the day time, so that sugar syrup can be ripened and sealed up like natural stores even in October.

Longmont, Col., April 11.

[It is true that the matter of locality has a great bearing on this question of starters versus full sheets for the brood-nest. Bees are much more inclined to swarm during a light honey-flow that continues on from day to day than when the nectar comes down with a rush. If what you say is true I should suppose that in Texas, at the beginning of a honey-flow, or just prior to the heavy part of it, the bees would build store combs; but after the season really begins, then they would build worker. In a warm climate, where the honey flow is moderate, just enough to incite swarming, and the season prolonged, it might be advisable to use full sheets.

I should be glad to hear from others on this question on which there seems to be so much variance of opinion. If we work at the problem a little longer we shall be able to harmonize the opinions of all. Mr. Gill has possibly explained why there is this conflict of opinion.

As to feeding outdoors, while you may be able to practice it in your locality at certain seasons, there are hundreds of others, in other localities, who had better let

it alone entirely. It is always attended with the danger of a general uproar in the apiary. We can feed in this locality a very thin syrup made of grape sugar and water, but we have never been able to feed with any degree of safety a syrup made of granulated sugar and water—at least not so strong a mixture as you used, or we should have a fearful uproar. I think it is a safe rule to say that the average beginner, in our locality, at least, had better feed in the hive, and that, too, towards night, so as to give the bees a chance to take in the syrup and get down to their normal condition after the excitement of the inrush of feed that comes from some mysterious place.

I well remember an experience I had at an outyard where I attempted to feed in the open air. Father had cautioned me against doing any feeding of that kind. But I wanted to learn for myself, and I did. No fact in my experience stands out more clearly than that. The yard was about a quarter of a mile from the road, but none too close. I fed in the open air. In the space of about half an hour I had the worst fighting and robbing at almost every entrance in the apiary, I believe I ever saw. There was a perfect pandemonium; and sting—I never saw all the bees of an apiary so vicious before. I took my bike,

after contracting the entrances down, and left the apiary in a hurry. I came back the next day to see if things had quieted down, which they had to a certain extent; but for days and weeks afterward I had to exercise the utmost caution. The bees had had a good taste of stolen sweets, and whenever a bee got a sip of honey from any hive I was working on it started a rumpus. The high key of a few bees would start the whole apiary almost instantaneously.—Ed.]

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Farm and Ranch Contest.

WINNERS IN THE CONTEST.

In the \$250 contest for local agents, which closed January 1, 1903, the winners of the prizes were as follows:

D. M. Jordan, Oglesby, Texas, number of yearly subscriptions taken, 75, prize \$50.

M. A. Brown, Stone Point, Texas, subscriptions, 61 3-4, prize, \$30.

A. E. Edwards, Greenville, Texas, subscriptions, 31 1-2, prize \$20.

Geo. B. Simmons, Ben Franklin, Tex., subscriptions 26, prize \$10.

L. Childs, Fairfield, Texas, subscriptions 13, prize \$10.

M. Lister, Cleburne, Texas, subscriptions 11, prize \$10.

Hattie B. Christie, Hammond, La., subscriptions, 10 3-4, prize \$5.

A. J. Reeder, Granger, Texas, subscriptions, 9, prize \$10.

Farmersville Times, Farmersville, Texas, subscriptions 8, prize \$5.

A. S. Davis, McGregor, Texas, subscriptions, 7 3-4, prize \$5.

K. McGinnis, Terrell, Texas, subscriptions 7, prize \$5.

Green W. Butler, Mexia, Texas, subscriptions, 6 1-2, prize \$5.

Perry Clements, Forney, Texas, subscriptions 6 1-4, prize \$5.

Lulu M. Brewington, Rosebud, Tex., subscriptions 6, prize \$5.

J. M. Fletcher, Atlanta, Texas, subscriptions \$6, prize \$5.

T. L. Haynes, Tioga, Texas, subscriptions 6, prize \$5.

Sherman Democrat, Sherman, Tex., subscriptions 6, prize \$5.

E. K. Rudolph, Van Alstyne, Texas, subscriptions 6, prize 5.

The remaining ten prizes of \$5 each, amounting to \$50, were divided among the following agents, each of whom secured five subscribers: E. G. Armstrong, Bartlett, Texas, \$3.57; Minnie F. Armstrong, Gainesville, Texas, \$3.57; T. D. Ball, Decatur, Texas, \$3.57; H. A. Carpenter, Franklin, Texas, \$3.57; Clarks-ville Times, Clarksville, Texas, \$3.57; Thomas M. Danforth, Goliad, Texas, \$3.57; A. F. Ernest Senior, Texas, \$3.57; B. G. Haskell, Stockdale, Texas, \$3.57; T. M. Harrison, Centerville, Texas, \$3.57; A. J. Keith, Mabank, Texas, \$3.57; C. A. Moore, Poolville, Texas, \$3.75; Florence Sheasby, Elgin, Texas, \$3.57; J. T. Triplett, May, Texas, \$3.57; W. H. Webber, Lampasas, Texas, \$3.57.

In making the awards two six-months subscriptions or four three months subscriptions counted as one yearly subscription.

It will be noted from the list above that in many instances the commission and prize money received by the agent amounted to as much or more than the total sum sent him to Farm and Ranch.

Write for particulars of the new \$250 contest, closing June 1, 1903.

ADDRESS

Farm and Ranch

Dallas, Texas.