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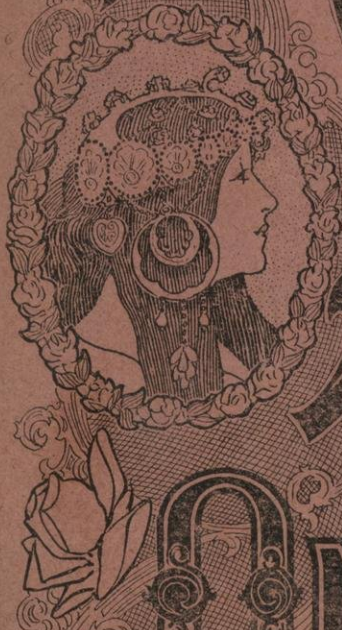
The Southland Queen



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The Southland Queen

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BEEVILLE, TEXAS, APRIL, 1904.

Foul Brood Among Texas Bees.

LOUIS H. SCHOLL.

Within the past year the contagious disease of bees known as foul brood has appeared in Bexar, Navarro and Uvalde counties, and recently it has also appeared near Beeville, in Bee county. While cases have without doubt occurred in other sections of the state previous to this time, they have received but little attention. The outbreak, however, of this disease in a most virulent form in three of the main honey-producing sections of the state requires that beekeepers be informed as to its nature, how to detect it and regarding the methods to be used in keeping it under control.

Foul Brood—What It Is.

Foul brood is a contagious disease of bees, which attacks particularly the larvæ or brood, causing their death and decay within the cells. This disease is caused by a germ or bacillus, known as *bacillus alvei*. This germ belongs to the vegetable kingdom, is composed of but a single cell, and finds its sustenance and multiplies within the tissues of the larvæ, or the food media by which the larvæ are surrounded. In its vegetative or active stage it multiplies with enormous rapidity. Upon the occurrence of favorable conditions, such as lack of food, low temperature, etc., it assumes the spore stage. In this stage the germ is very resistant to chemical agents and disinfectants, and to high and low temperatures. Upon the recurrence of favorable conditions this spore again becomes active and commences to multiply, causing the disease to again appear in active form. Thus it is that when honey containing the spores of foul brood is fed to bees and especially to larvæ, the disease appears. In like manner the spores—and probably the active stages of the germ, can be carried by robber bees from an infected colony to a healthy one, or from an infected hive, frame or other

object that may be exposed where bees can obtain access to it.

The disease is characterized by the death of the larva in the cells of the brood chamber before reaching maturity. The dead larva quickly decays within the cells, few or none of them being removed by the bees, as is usually the case when larva or bees die within the hive from other causes. The decayed mass assumes a glue-like or "ropy" consistency, which is very noticeable, especially if a toothpick or other pointed instrument be inserted into the dead brood, twisted around and slowly withdrawn. The decayed mass will be drawn out in a stringy thread to the distance of three-eighths to three-quarters of an inch. In no other disease is this stringy character noted except in black brood, in which case, however, it is not so marked, rarely extending more than one-eighth of an inch when drawn from the cell. The decaying larva give forth a particularly foul odor, sometimes compared to the odor of a very hot pot of glue. This odor is never noticed about the hives except in case of foul brood, and the detection of such an odor on opening a hive should at once put the bee-keeper on his guard. Where the disease has made some little progress this odor is at once evident upon taking the cover from an infected colony, and is regarded as one of the diagnostic characters of the disease. After the larva has died and decayed within the cell the mass gradually dries up until it occupies a portion of the cell bottom and appears as a brown, coffee-colored mass. To detect these dried up masses requires close scrutiny in a good light, for example, in a bright sunlight with the sun shining directly into the cell. These dried up masses contain the spores of foul brood, and a larva placed therein will contract the disease. Honey placed in such a cell by the bees will also contain the spores and be capable of transmitting the disease to any colony to which such honey is fed.

As the larva decays within the cells the cappings become sunk and often perforated. Larva, capped cells, perforated caps and dead larva appear scattered through the combs, and a comb thus diseased does not present the regular and even appearance nearly always noticed in healthy, sealed larva. These perforations in the cappings are not, however, a certain indication of foul brood. Perforated cappings often occur in perfectly healthy brood, and especially in very hot or sultry weather. "Ropiness" and the foul smell should be relied upon as the main characters which determine the presence of this disease in the hive.

It has been found by actual ex-

periment that the spores of foul brood are not always killed by boiling for thirty minutes, (Howard) and are not always killed by boiling for forty-five minutes. Boiling an hour at a temperature approximating 112 degrees will kill both the spores and active germs of foul brood. According to the investigations of Dr. William R. Howard, of Fort Worth, the spores are destroyed by exposure to the air for over forty-eight hours, but when protected from direct contact with the air, the vitality, and hence the power to reproduce the disease may be retained indefinitely. Hence it is seen that the boiling of hives, frames or honey for over an hour, completely submerged in the boiling water, will destroy the spores of foul brood. It is also noted that the direct exposure to the air will kill the spores.

It does not follow from this, however, that the mere airing of hives, frames, or infected clothing will guarantee the death of the spores. Almost every hive, frame or article of clothing used around the apiary has upon it bits of wax, honey or propolis sufficiently large to enclose within it the spores, and hence protect them from the air. Both the germs and spores of foul brood are infinitely small and have to be magnified 300 or 400 times before being at all vsiible to the eye, hence a very small portion of wax or propolis is sufficient to protect the germ or spore from the direct action of the air, therefore merely airing infected apparatus or clothing is not a sufficient measure to guarantee absolute disinfection.

The McEvoy method of treating foul brood is based upon the forced conversion of honey into wax. The method as given by Mr. McEvoy is as follows. During the honey flow the combs and bees are removed from the hive that is infected, and replaced by new frames containing only starters. The bees are now shaken from the combs into the hive and allowed to remain until the starters are drawn out. None of the brood or honey is left in the hive. This shaking is done in the evening after the bees have ceased flying for the day, so that there will be no danger of robber bees carrying the infected honey to other hives. After the starters are drawn out (usually after about four days) they are replaced with frames containing full sheets of foundation, and the bees again shaken into the hive. By this method all honey taken from the infected hive by the bees is used up in wax secretion before any brood can appear. The diseased brood is piled up two or more tiers high, and as many of the larva as may be allowed to mature when the colony thus formed is treated

again (first shaken on to starters and then on to full sheets), and given a queen cell or queen. The foul brood combs and the frames containing them and the decayed brood are burned. The frames and starters taken from the bees when the latter are shaken on to full sheets are either burned or disinfected by boiling (for over an hour). According to published reports of the McEvoy process, the hives are not disinfected, but the bees are shaken back into the same hive. We have not personally tested this method, and therefore will not vouch for the safety of such a proceeding, as it seems possible that the particles of infected honey or wax dropping upon the bottom board or remaining in the corners of the hive may hold the spores of the disease sufficiently long to infect the brood developed after the treatment is completed. The introduction of a single spore into any one of the larva cells will start the disease. In such a case the cure would appear for a while to be complete the disease would eventually re-appear.

Preventing the Spread of Foul Brood.

In the first place colonies that are known to be affected should not be handled when there is the least danger of robbing. If the honey flow is well on and the bees are working lively in the fields, it will be safe to handle infected colonies during the day. Otherwise they must be handled in the evening. By "evening" we do not mean "afternoon" or beneath a tent. In working with a foul brood colony care should be taken that no wax, propolis or honey from the infected hive be allowed to come in contact with the clothing. After examining a diseased colony the hands should be thoroughly washed with one of the following solutions:

1—Carbolic acid as strong as the hands will stand, about one part of acid to ten of water.

2—A solution of corrosive sublimate, made at a strength of one part sublimate to one hundred parts of water.

3—Formalin (formaldahyde) diluted with water at the rate of one part of formalin to twelve parts of water.

All of the above solutions are poisonous.

All tools used about the infected hive should be thoroughly washed, or better still, soaked in this solution. Do not take a smoker or other tool from an infected apiary to a healthy one.

Do not under any circumstances permit robbing, whether colonies are healthy or not. In case robbing cannot be stopped in any other way close up the hive bee-tight until dark, allowing ventilation, of course.

Do not expose any infected hive,

wax, frames, combs or honey where bees can obtain access to them.

If any of the colonies in an apiary are diseased do not under any circumstances transfer comb, brood or honey from one colony to another. In the first stages of the disease you will be unable to detect it, and may transfer the disease from colony to colony unknowingly.

It should be constantly kept in mind that foul brood cannot develop without the presence of the germ, and all precautions should be taken to prevent the introduction of this germ or its spores into the healthy colonies.

Do not tolerate any box hives or "log gums" within three miles of your apiary. If you cannot persuade the owner of such box hives to transfer or destroy such colonies himself it will pay you (if there is no foul brood in your locality) to buy them outright and transfer or burn as you see fit.

For the same reason, whenever a bee tree is discovered in the locality the bees and honey should at once be removed and burned. Box hives and bee trees may contain diseased colonies, and swarms both natural and absconding, may serve to again disseminate the disease aft r it has apparently been removed from all the frame hives in the neighborhood.

Do not allow diseased colonies to remain in the yard or elsewhere, without treatment or destruction. When the colony becomes much weakened by the disease it often absconds, the hive evidently becoming too foul for them. These absconding swarms often go to healthy apiaries and there unite with healthy swarms or enter healthy colonies, thus starting the disease. A case of foul brood within ten miles, if not properly cared for, is a menace to every bee-keeper within that distance and possibly a greater distance.

Do not allow swarms to abscond and do not, under any circumstances, ship, sell or give away any hives, honey, wax or queens from an infected apiary. Examinations have shown that the germs of foul brood are at times found in the ovaries of the queen, though not always. There is, therefore a possibility of transmitting the disease by means of queens alone. Wax from infected apiaries, before being made into foundation, should be kept at a temperature of not less than 194 degrees for at least three hours.

If the above precautions are taken the spread of the disease can be materially checked.

Treatment.

If but few colonies or a single colony in the apiary is infected, we strongly urge that it be at once closed up tightly and at dark the bees killed by the use of high life

(carbon bi sulphide) or gasoline—beware of explosions!—and then the entire diseased hive and contents burned completely. This burning should be done during the night and plenty of fuel used to make sure that every particle of the melted wax and honey is burned and none of it left for the bees to gather up next day. When burning foul brood colonies build a large fire in the bottom of a pit specially dug for this purpose, so that the remaining coals and ashes, together with the honey and wax which may have run out of the fire may be completely covered with soil to prevent the bees from getting any of the infected honey. The loss of one or two colonies by burning is small compared with the risk to be taken when treatment is attempted.

If a large proportion of the apiary is infected, provide new frames or frames that have been disinfected with the corrosive sublimate or formalin solutions, or by boiling, with only starters in the new hives. If the hives used have been previously infected we advise burning them out with kerosene, or with a pear burner and painting them thoroughly, both inside and out, with paint containing corrosive sublimate or formalin in the proportions given above. At twilight shake the bees from the diseased colonies into these hives upon the old stands. If there are but few colonies infected we would recommend the immediate burning of all the old hives, frames, brood and honey, or their burial so deep so that the bees can never obtain access to them. If there are many diseased colonies they can be tiered up after shaking and a few bees left to care for the brood, and the living larva allowed to hatch, after which they can be treated for foul brood the same as the first colonies, and then given a queen cell or a queen. Do not shake the bees from such a colony back into the original colony.

After the cure is complete these bees can of course be united with any colony desired. After the bees have been shaken into the new hive with starters, allow them to remain long enough for the starters to be drawn out, and then shake again on to full sheets of foundation in the same hive. Burn the comb made from the starters, or melt at high continued temperature, and also burn or disinfect with the carbolic acid solution the frames which contained these starters. All shaking should be done in the evening after the bees have ceased flying for the day.

If the honey-flow stops while the bees are still on the starters or full sheets resort at once to feeding and keep up an artificial flow. A syrup made of one part pure granulated sugar to one part of water,

mixed cold and stirred thoroughly and fed in the evening is to be recommended. We do not recommend the feeding of piloncillos for the reason that we have found the syrup made from this sugar (owing to the organic compounds contained, other than sugar) ferments rapidly, producing a large proportion of acetic acid, which is poisonous to the bees. During damp weather especially sufficient moisture is taken up by the piloncillos to allow fermentation while they are still in a solid state. Without being made into syrup at all, they often show the presence of considerable acid. Their use for feeding is, therefore, dangerous, as they may contain acetic acid when perfectly dry.

While the McEvoy treatment, as geneaally practiced, makes use of the old hive without being disinfected, yet, as an additional precaution, in the case of the first appearance of the disease, we strongly advise shaking into a new or disinfected hive. This is a matter, of course, to be decided by the bee-keeper himself, but it is best to be on the safe side.

Additional Suggestions.

Remember that the introduction of foul brood into a healthy colony either by honey, wax, propolis, or by the bees themselves will produce the disease. Also remember that successful treatment requires the removal of all infected honey or apparatus beyond all possible reach of the bees and also requires the thorough disinfection of everything coming into contact with infected colonies or honey before being used in a healthy colony. Any method that does not fill these requirements will be a failure. The use of drugs or patent medicines can never do more than hold the disease in check temporarily. They are not to be recommended under any circumstances, and we do not advise the use of such, as it is only a waste of time and will only serve to continue the disease in the apiary or locality.

We do not advise the use of "foul broody" honey for human food. Every bee-keeper should read carefully "A B C of Bee Culture," pages 151-161, edition of 1903, also Dr. Howard's booklet on Foul Brood, published by Geo. W. York & Co.

We append herewith a copy of our foul brood law, which was passed by the legislature last year and which every bee-keeper should read carefully:

[House Bill No. 239.

AN ACT

To provide for the protection of honey bees against foul brood and other contagious diseases, and providing that all bee-keepers report to the State Entomologist when infectious diseases exist; providing for collecting the expense of eradicating the

disease, and fixing the charges upon the owner of the bees; providing for the extermination of all contagious diseases, and providing penalties for the violation of this Act.

Be it enacted by the Legislature of the State of Texas:

Section 1. If any owner of, or any person having control or possession of any honey bees in this state knows that any bees so owned or controlled are affected with foul brood, or any other contagious disease, it shall be and is hereby made his duty to at once report said fact to the State Entomologist, setting out in his report all the facts known with reference to said infection. The State Entomologist shall have full power in his discretion to order any owner or possessor of bees dwelling in hives without movable frames, or not permitting of ready examination, to transfer such bees to a movable frame hive within a specified time. In default of such transfer the State Entomologist may destroy or order destroyed, such hives, together with the honey, combs, frames and bees contained therein without recompense to the owner, lessee or agent thereof.

Section 2. The State Entomologist shall prescribe such rules and regulations as may in his judgment seem necessary for the eradication of all contagious diseases of bees, and if at any time the Entomologist finds or has reason to believe that the owner or keeper of any bees, or the owner of any apiary has refused or is refusing to comply with all or part of any such rules or regulations, then and in that event the State Entomologist is hereby authorized to inspect said bees, and if necessary burn all diseased colonies, appliances and honey, and do any and all things necessary in the premises to eradicate foul brood or any other infectious diseases of bees.

Section 3. When any owner or possessor of bees shall fail to carry out the instructions of the State Entomologist, as set forth in Sections 1 and 2 of this Act, the State Entomologist shall carry out such destruction or treatment and shall present to the owner of said bees a bill for the actual cost of such destruction or treatment. In the failure of the owner or possessor of such bees to pay said bill within thirty days after the delivery of same to himself, tenant or agent, or within thirty days after mailing same to his usual postoffice address, the State Entomologist shall certify to the County Attorney of the county wherein such bees are located the amount and items of such bill, and the County Attorney shall file suit for the recovery of said account. All moneys recovered by the County Attorney for such destruction or treatment shall be paid into the hands of the

County Treasurer, to become a part of the fund for carrying out the provisions of this act.

Section 4. If any owner or keeper of any diseased colonies of bees shall barter or give away any infected bees, honey or appliances, or shall expose any other bees to the danger of infection of the disease, or shall fail or refuse to report, as provided in section 1 of this act, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not exceeding two hundred dollars.

Section 5. The fact when young colonies of bees will leave the mother colonies is near at hand; that there is no existing law properly governing colonies affected with foul brood, creates an emergency and an imperative public necessity requiring the suspension of the constitutional rule which requires bills to be read on three several days, and the same is so suspended, and this act shall take effect and be in force from and after its passage, and it is so enacted.

Passed the House March 20, 1903—ayes, 112; nays, 0.

Passed the Senate March 30, 1903—ayes, 25; nays, 0.

Foul brood is a dreaded scourge to the bee-keepers, and if not properly taken care of in time it would wipe out apiculture. We have been fortunate not to have had this disease in Texas very long, but now that it is here it behooves us to take prompt steps to stamp it out.

The bee-keepers in the stricken districts are asking strongly for help, but we are without funds to do what ought to be done.

We have the above foul brood law, which would help us toward doing much good, but as no appropriation was made by the legislature for carrying out this work, we have been unable to give the desired help.

The bee-keepers have organized in several localities and an appeal will be made to the governor for the necessary means to have a foul brood inspector take the matter in hand. This we hope will succeed, for it will mean much towards saving one of the largest industries of the State.

College Station, Texas.

The Place for the Next Meeting of the National Association.

FRANK BENTON.

As a member of this organization I am of the opinion that stronger reasons can be presented in favor of holding the next annual convention in St. Louis rather than in any other place.

First—There will not be the least doubt as to the railway rates, and they will be lower than can be se-

cured by the association itself, even if the required number to secure reductions on the certificate plan from the various sections of the country could be got together in any other city.

Second—Everyone wants to go to the grand World's Fair, which will be held in St. Louis in 1904.

Third—Many bee keepers who are able to give more information than they are likely to get themselves at such a meeting would hardly feel disposed to pay their fare to a distant point for the sake of presenting in person their views, which they could give to the public through the medium of the bee journals, unless there should be at the terminus of their journey some other attraction in addition to the bee convention.

Fourth—St. Louis is central. It will appeal to bee-keepers from the east and the west, from the north and the south. It is not too far east for the rocky Mountain and Pacific coast bee keepers, nor too far west for those from the middle and eastern regions.

Fifth.—It has never had a National bee-keepers' meeting, although nearly all of the important cities about it have been thus favored, some of them even having had three or more conventions each, Chicago, Indianapolis, Cincinnati, Lexington, Lincoln, and even St. Joseph, (which is in the State of "Mizzouray." New Orleans and also Atlanta, have each had a bee-keepers' convention, which was, in each case, intended to be national in scope, and besides numbers of bee keepers from the adjacent region they attracted some also from the north.

Sixth—Accommodations of the right sort for holding a convention in St. Louis can easily be secured through proper application in time, and a definite fixing of the date of the meeting long enough before hand.

Seventh—Dozens of suggestions present themselves to the mind of any one at once as to the lines and opportunities which will be afforded to make a creditable showing for the industry, and of the work of the National society which represents it in this country. And these will be manifestly greater in connection with such an exhibition of apiarian products and implements as might be made at the St. Louis exposition than would be the case were Cincinnati, San Antonio or Salt Lake City to be selected.

When the great Louisiana Purchase Exposition has passed I shall be heartily in favor of holding a meeting in Texas, and one in Utah. In this connection it may be of interest to know where the thirty-four conventions have been held. Indianapolis has had 3; Cleveland, Louisville, Pittsburg and Toledo, 1 each; Philadel-

phia and New York, 2 each; Chicago, 4; Cincinnati, 2; Lexington, 1; Toronto 2; Rochester, Detroit, Columbus, Brantford, Keokuk, Albany, Washington, St. Joseph and Lincoln, 1 each; Buffalo, 2; Omaha, Denver and Los Angles, 1 each.

Washington, D. C.

Our Trip to Beeville.

R. A. LACKLAND.

I promised to write you when I got home, but have been very busy; was away last week on the jury at Pleasanton, so I am a little late. But here I come at last. We left home on the 8th of March, headed for the convention and went via Floresville, where we left our teams and boarded the Southern Pacific train for Beeville, which was a little late making it in. It was sun down when we reached our destination. We were strangers in a strange land as it were, but not long. After looking about the depot for a moment I said to Selby: "We have got to rustle us a roosting place for the night, and right away, too." So we walked quietly across the street to the postoffice, and as we went along I could hear some one say (referring to Selby and I): "They must be beemen; they are strangers," but we kept on until we came to the corner, opposite the bank. There we met two gentlemen (one was a Mr. Hodges, the other I disremember), who told us what we wanted to know, and also called Mr. E. J. Atchley and introduced us to him, and from that time on we were no longer strangers in Beeville. Mr. Will Atchley took us to his home, where we met his better half, and the two made us feel at home, and to whom we want to extend many thanks for the kindness shown us while we were there.

The next day the meeting was called to order by Bro. Atchley, the president. After a song and prayer by Bro. Sallee the convention went into a general business session. We got acquainted with several bee-men, all good-natured, good looking fellows. (Bee men generally are.)

We had a general good time, and a good dinner was spread by the ladies each day. The ladies always play their part, and it is generally a good part, or at least Selby and I think they did about dinner.

Our last night in Beeville was spent at the hospitable home of Mr. and Mrs. E. J. Atchley. The latter, we are sorry to say, was ill with pneumonia, and hope she has recovered by now. While we were there we were treated as only dear old bee people can treat a man. Many thanks, Bro. A., you will long be remembered. On our way back to the train next morning we stopped at the bee hive factory owned and controlled by Mr. Chas.

Atchley, a very generous-hearted fellow, who took great pleasure in showing us through different parts of the factory, which was quite a treat to us, as we had never been inside of a bee-hive factory before. Mr. Charlie is able to make almost anything a man needs in the bee business. Success to you, Mr. Charles.

Well, this is my first letter to the Queen, and maybe I had better close, but will say that my bees are gathering a little honey from mesquite, which is just coming into bloom.

Now Bro. A., if you will again allow me to thank you and the entire family, I will close. I will write again and come to the convention in September.

Amphion, Texas.

BEE-KEEPERS' MEETING.

Nueces Valley Association Held Interesting Meeting in Beeville on April 4.

The first quarterly meeting of the Nueces Valley Bee-Keepers' Association, the new organization of apiarists, was called to order at the court house last Monday morning by Dr. C. S. Phillips, the president.

The members present were W. H. and Huber Laws, E. R. Jones, Mac and Joe Powell, J. W. and Nathan Pharr, C. P. Courtney, W. C. Nutt, J. K. Lippard, G. W. Hufstedler, C. P. Breeding, W. J. Davis and Will Atchley, Beeville; J. W. Wolf, L. B. Archer, Mineral; J. K. Kring, Mathis; M. P. Hill, Berclair, and J. W. Small, Clareville. Several new members were admitted.

The foul brood committee, composed of W. C. Nutt, E. R. Jones and Will Atchley, made a report. They stated that Mr. Louis Scholl, state foul brood inspector, arrived here on the evening of the 11th ult., and on Monday, the 13th, they accompanied him on his trips of inspection to the different apiaries of neighboring bee-keepers. Several cases of foul brood were found to exist among W. C. Nutt's bees, consequently fifteen colonies were destroyed in order to banish this disease, and Mr. Nutt's old hives were treated; also this committee left instructions with him how to continue this treatment. They then proceeded to Clareville, where, out of three yards they found eight cases, two at Mr. Webster's, also several colonies of Mr. Gillum's bees were affected, and there was one case at Clareville. One case was found in the Cook pasture, where Bob Nutt's bees are located, having about eighteen colonies there. This case of Mr. Nutt's originally came from Mr. Hufstedler's apiary, which was inspected, and several cases of foul brood found to exist among his bees.

This committee, with Mr. Scholl, inspected thirty-three different apiaries, and these few cases of foul brood were all that existed. This report was adopted and the committee will be retained.

The committee on freight and express rates, consisting of Messrs. W. H. Laws, C. A. Butts and Will Atchley, reported that they had received much encouragement from the express companies in regard to better rates on honey. Mr. Engle, the representative of the Wells-Fargo Express company, informed them that the manager of his company would soon be down here to confer with them in regard to this matter, and he will notify them a few days in advance in order that they may be present and can talk the matter over personally. It was moved and carried that Mr. M. C. Scott, of Dallas, of Farm and Ranch, who will represent the South Texas Bee-Keepers' Association, also represent the Nueces Valley association at Austin before the railway commissioners in regard to securing better rates on honey.

The committee on exhibition, consisting of E. J. Atchley, C. A. Butts and W. H. Laws, reported that they are preparing to send a nice exhibit from Beeville and the surrounding country to the World's Fair, and Mr. Atchley, who is in direct communication with the managers of the exhibit committee, has already spoken for space. Bees, honey and nuclei will be exhibited.

It appearing that it was necessary to have inspection for foul brood made more often than is afforded by the state inspector, it was decided that a special inspector be selected by the association and the governor asked to recompense him from the state emergency fund.

The committee on constitution and by-laws made a report which was adopted. The constitution and by-laws will be printed in pamphlet form and distributed among the members shortly.

W. H. Laws was elected general agent of the association in marketing its product, it being the purpose of the association to sell their honey through one agency in order to obtain the best market and avoid competing with each other.

The subject of establishing a hive factory and a monthly journal was also favorably discussed, and a decision will be made in the matter at the next regular meeting of the association, which will be held next July.

Our long, six months' drouth has been broken at last, and good rains have fallen over our South Texas land. This may cut short the present flow, but means honey later on.

THE SOUTHLAND QUEEN.

E. J. ATCHLEY - - Editor and Publisher

Entered at the postoffice at Beeville, Texas, as second-class mail matter.

BEEVILLE, TEX., APRIL, 1904.

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I call your attention to the reading of our Texas foul brood law, published in this issue. The law is good as it is, but we are desirous of having it amended to read that no bees shall enter this state without a clean bill of health from an inspector from where they are shipped. It will do but little good to cure the disease and allow it to keep coming in. We do not mean to treat foul brood, but we will try to eradicate it by burning every colony that takes it and bury the ashes. Foul brood has been treated in Canada and other places now for about a quarter of a century, and still they are treating it, and will continue to treat it so long as remedies are used. Just so long as medicines are used to treat foul brood it will stay, and we Texas folks are going to try to have laws stringent enough that we can lawfully stamp it out, root and branch, and do it *now*. It may be to the personal interest of Canadian inspectors to treat and treat foul brood, but it is certainly very damaging to any bee-keeping community to have foul brood treated with drugs, and the only sure way is to cremate the colonies as fast as found with it. I trust that every bee-keeper in this state may join in and assist in eradicating and forever doing away with foul brood. If we will stamp out what is now in Texas and prevent its coming in by lawful inspection at our border lines, and a clean bill of health from point of shipping will effectually do away with all future troubles along this line. We now have some fine lawyers among our ranks who are glad to help us out.

See the report of the last quarterly meeting of the Nueces Valley Bee-Keepers' Association in this issue.

A copy of our state foul brood law will be found in this issue, and it should be read by every bee-keeper.

Mr. Louis H. Scholl writes that it is almost impossible to spare

time from his college duties to properly attend to the inspection of foul brood all over this big state, and he and Prof. Sanderson suggest that inspectors be appointed by our governor for each division of Texas, say North, Middle and South. This will make it easier to get an inspector when needed. We are going to attend to our South division at once, and Middle and North Texas must do likewise. This is a matter that will not admit of delay or carelessness if we expect results.

I am sorry to have to report that the editor was so unfortunate last Saturday, the 9th inst., in getting his left hand badly lacerated on a large cutter head in the factory. I have run that same cutter head off and on for ten years without getting hurt until now. It will likely be a month or more before my hand will be sufficiently healed that it can be used, and coming just now at our busiest season, is a serious drawback, indeed.

Willie A. and the editor are loading a car of bees for Kansas this month, in which about 600 single story colonies will be shipped. Willie will put in 500 and I 100, and about June 1st I will ship 500 colonies to Colorado.

We are now, April 12th, harvesting our first new honey for this season, and we will try to ship thirty cases of 2 60's comb honey this week, and it is snow white waheah honey, and we get a good price for it.

This would have been a splendid year to raise section honey, as the waheah flow came on before the bees had time to be over strong, and they did not catch the swarming fever, and they could be crowded right into supers without danger of swarming, and our dry winter kept down the over abundance of pollen, and this held the bees back.

E. A. Ribble of Roxton, Texas, has sent me his catalogue of bees and apiarian supplies. Send for one; it tells how to introduce queens and there is other valuable information in it.

The light showers we have had lately were of great benefit to bee-keepers and with good weather we expect a flow from mesquite in June.

From all the collected evidence up to date everything points that the National will meet in St. Louis early in October. Any bee-keeper desiring to send exhibits to the World's Fair can take the matter up with me, (E. J. Atchley) as I will have space, and see that all exhibits are properly handled. Put

your name on your packages of honey, wax, bees or other things, and tell where produced and any other information, and I will see that all get proper credit. Better have your exhibits for South Texas here by June 1st at most, and I will have all forwarded by freight to St. Louis. There will be a low rate, I am told, and all Texas bee-keepers that can do so ought to attend.

We have not had much swarming among the bees this season on account of the dry winter, and we may get more honey as a consequence.

On page 84, April 1904, American Bee-Keeper, Bro. Hill gets off the following: "The Southland Queen reprints Mr. Poppleton's article on 'Bee Paralysis,' and erroneously credits to Arthur C. Miller. The Queen appears to become badly 'mixed' when it undertakes to do or say anything in regard to this particular malady." By way of explanation I beg to say that the article in question was selected and used without my knowledge, and was certainly an oversight in my printer, Mr. E. C. Goodwin, who can here explain. I often tell Mr. Goodwin to select something to fill out with in case he runs short of copy, as I am usually twenty to thirty miles distant from him, and he usually makes wise selections, in as much as he is a practical bee-keeper himself, he is a competent judge, and I am not afraid to trust his judgment. If he made an improper credit he is fully able to explain. It has appeared for some time that Bro. Hill has had a crow to pick with the Queen or its editor. What about I am unable to solve. With all due respect and love for Mr. Poppleton and Bro. Hill, I beg to say that neither Mr. Poppleton nor the Bee-Keeper has put forth any more light on bee paralysis than all we old bee-keepers knew twenty years ago, and I am too busy now to take this matter up, and especially through a bee paper that uses its influence and partiality to make its points unfairly. If Mr. Poppleton desires to do so I will meet him before a body of competent bee-keepers at St. Louis next October and debate the question of bee paralysis and allow the judges to decide which is right. It may be that drones and queens have paralysis some times, but Mr. Poppleton ought to know that bees often feed queens and drones, and the vile, rotten pollen mess can be fed as well as honey. I can read plainly between the lines that Bro. H. E. Hill convinced against his will would be of the same opinion still. The Queen does not now claim that she is the only bee paper published in the South, but she thinks she is a full

grown sister by the side of the American Bee Keeper, and certainly the Queen wishes her sister much success.

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

Dear Sir—I selected the article referred to above, not that it coincided with my opinions or that I considered it meritorious, but as a "filler." Being pressed for time after "measuring up" it was all I had on hand that would "fit." I have never seen fit to take the American Bee-Keeper, and attribute the improper credit to the fact that the paralysis article was extracted from another paper, in which I had read an article by Mr. Miller, and it is likely that "my mind wandered hence." In the phraseology of a "printery" such mistakes are called "bulls," and I have yet to see a publication that is proof against them, not even excepting the American Bee-Keeper.

Fraternally,

E. C. GOODWIN.

Dinero, Texas.

OUR SCHOOL

BY THE EDITOR.

I would like your opinion as to which is the best race of bees. I have been thinking of breeding up my bees, and I have been thinking of getting a Cyprian queen. SAM SEVERSON.

Greenwood, Wis.

Friend S—I am somewhat at a loss to know just which race of bees would be best for Wisconsin. It has been said that for one flow only Italians are as good as any bees for a honey crop, but here in the extreme southern part of the United States, where we have three or four honey flows, we need a race of bees that will always keep a strong working force, and the Italians do not do this, as they crowd the brood nest, and the queens do not have a chance to keep a full standing force. For these reasons it has been found that either Carniolans, Cyprians or Holylands are better for a southern climate, where the summers are long, say nine months of the year. You might try the Cyprians in your locality and report. I fell sure if you would cross the Italians and Cyprians you would have as good all purpose bee as any one for your locality, or any other, for that matter.

Last summer my bees stored a great deal of honey, which was so bitter that it was unfit for use. I suppose they gathered it from the little yellow bitter weeds so common in all this section. Can you tell me any way by which this honey can be rid of its bitterness? I suppose fully half of my crop was this kind of honey. Will you also please tell me how to get honey that has granulated or sugared out of the combs? During the winter I had quite a number of combs to thus granulate, and I do not want to have to lose these combs, as the honey in this shape is not fit to use. I have the Italians in eight-frame Langstroth hives, about forty stands, and up to to-day have had only two swarms. I went through all my hives about two weeks ago, cutting out queen cells, and giving all of them plenty room for brood-rearing by extracting all the honey they could spare, not forgetting that April is one of the hardest months

on bees. My colonies are all in fine shape now, and by May 1 they will be extra strong, just in time for horsemint and alfalfa. J. W. SIMMONS.

Mexia, Texas.

Friend Simmons—There is no way by which the bitter taste can be taken out of the honey, but it gets milder by age, but never clear of the bitterness The best way to do is to have this bitter honey all stored in regular brood frames and used to feed late swarms or stimulate with to catch your good honey. The bees will usually clean out all granulated honey from combs if placed in the center of brood nest in early spring. I am pleased at your kind consideration of the bees through April, and this should be heeded by all bee-keepers to carry their bees through the dearth.

I desire to thank you for the Queen the past three months. I like the journal and shall remit for a year's subscription as soon as you inform me that you have not yet received the stamps I enclosed to you for the same at the beginning of the year, which you notified me you had not some time back in answer to an inquiry. I am very much struck with Mr. Chambers' letters on the superiority of the shallow hives over the standard L. hives for early brood-rearing, as well as for the production of honey. He seems to be a very practical man, whose ideas and judgment are worth much. I for one am of the opinion that he has a big advantage over the man with the deep hive, especially when the season is so early as it is this year. If it was not for fear of consuming space in the Queen that could be filled with something of more importance to the bee-keepers, I should like to ask some questions occasionally of Mr. Chambers, but I think a person of such limited experience as myself—only three years, had better leave space for some one else, and I will get my information through personal letters to him, and if he sees fit can answer through the columns of the Queen. There has been a nice mesquite honey flow, with a little mixture of catclaw, for the past two or three days, but this morning, the 26th, we have a norther with a mist of rain. What will become of the bees that have been caught out this morning laden with nectar should they not be able to get in today, and have to lay out tonight? Would they survive and return tomorrow should the weather moderate? What effect will the cool wave have on the present mesquite flow? E. N. SMITH.

Floresville, Texas.

Friend Smith—Your questions, I am sure, would be answered by Mr. Chambers through the Queen, so let us have them for our May issue. The stamps have not turned up, but in cases like this I am always willing to halve up, so you can send half price, and I will receipt for a year. If the weather did not get too cool all bees caught out went home next day. The cool wave, of course, hurts mesquite, as it seems to be a hotbed plant, and cannot resist cool weather. We expect June to bring us a good mesquite flow. Many thanks for kind words.

When writing to our advertisers you will confer a favor on us and them by stating that you saw it in the Queen.

The Pure Food Law.

To the Southland Queen:

I observe with great satisfaction that on page 291 of the Southland Queen for February, 1904, you have urged bee-keepers to write to their senators asking their support for the Pure Food Bill, now pending in Congress. It is printed in the Queen "Hebron" bill, but should be "Heyburn" bill. Senator W. B. Heyburn of Idaho, chairman of the committee on manufactures, has charge of the bill. He has given notice in the Senate that he will call it up for consideration tomorrow. I intend to be present and hear the remarks if any are made.

I have written letters to Senators Heyburn, Burrows and Alger (from Michigan, of which State I am still a legal resident) and Karnes and Smoot (of Utah, whose State Bee-Keepers' Association asked me to represent it at the National Pure Food Congress held here.) Copies of some of these are enclosed herewith.

Yours truly,

FRANK BENTON.

March 15, 1904.

Hon. Thomas Kerns, United States Senate, Washington, D. C.:

Dear Sir—At the various national pure food congresses which have been held in recent years in this city, I had the honor of representing, by appointment, the Utah State Bee-Keepers' Association, and in that capacity desire to call your attention to a bill now pending entitled "An act for preventing the adulteration or misbranding of foods, etc," being House Resolution No. 6295, which I understand Senator Heyburn, of the committee on manufactures, will call up for consideration of the Senate tomorrow, March 16.

The substance of this bill is similar to the bills which are endorsed by the pure food congresses, and its provisions, in so far as they affect the apiarian interests of the country, are quite acceptable to the bee-keepers of the United States. Apiculture is one of the important and growing agricultural industries of the State of Utah, as I presume you are aware, and an excellent class of people engage in the work there. They depend upon eastern markets for their products, and wish to have such laws enacted as will protect them against unfair competition, such as the adulteration and misbranding of goods. I am fully convinced, therefore, that you would do the people of your State a service to give your earnest support to this measure.

Yours very truly,

FRANK BENTON.

In the National Pure Food Congress, held in Washington, D. C.; representative of the United States Bee-Keepers' Union, and of the Utah State Bee-Keepers' Association.

March 12, 1904.

Hon. Russel A. Alger, United States Senator, Washington, D. C.:

Dear Sir—I have before me House Resolution No. 6295, "An Act for preventing the adulteration of foods, etc," and desire in behalf of the apiarian interests of this country, which I had the honor of representing, in a measure, at least, at the various pure food congresses which were held in the city of Washington in recent years, to state that the bee-keepers of the country are, I may say, almost unanimously in favor of legislation which shall prevent the adulteration and misbranding of their products, as well as which shall regulate interstate traffic in such adulterated or misbranded products.

It is estimated that there are within the borders of the United States 700,000 persons who are engaged in the production of honey. The annual product of their labors is conservatively estimated at $20,000,000. Although this most healthful natural sweet, honey, comes in direct competition with various syrups artificially adulterated and otherwise, as well as sugars of all descriptions, bee-keepers have never asked for nor received any such bounties as were for many years paid to sugar producers, but they have asked and desire that inferior products of low sweetening power, such as glucose, either alone or mixed with honey, shall not be permitted in the open market labeled as pure honey. They fear, however, no honest competition which labels all of these substances exactly in accordance with their nature.

I am certain that I voice the sentiment of the entire mass of intelligent bee-keepers of this country in urging the support of the legislation proposed in this bill, in so far as it affects their interests.

Very truly yours,

FRANK BENTON.

In the Pure Food Congress held in Washington, D. C.; representative of the United States Bee-Keepers' Union, and of the Utah State Bee-Keepers' Association.

Legal residence—Detroit, Mich.

Reply to Mr. Chambers.

L. B. SMITH.

I can not see for the life of me how Bro. Chambers could conceive the idea, from the reading of either of my articles in the Queen, that I was seeking a controversy with any one on the best hive or race of bees.

Neither do I see why any person should consider a reply necessary to either article, unless such person was anxious for a discussion on the subjects. I wish to state just here that I have no "ax to grind." What I have written has been principally for the novice and not for the expert in apiculture. It is true I rear a few Italian queen bees each season, but

these are principally for my own use; and I could just as easily rear Carniolans, Cyprians or Holyland bees if they were superior to the imported Italians in my hands.

I further wish to state I have no personal malice towards Mr. Chambers. On the contrary, I hold him in high esteem as a bee-keeper and as a man, and consider him one of the best apicultural writers in the south, notwithstanding his rough and emphatic way of expressing his ideas in print. With these remarks I shall attempt a reply to some of Mr. Chambers' claims.

Now, Mr. Chambers I am going to reply to some of your fancied points "Yankee" fashion. That is, I am going to answer some of your questions by asking others.

If your little, shallow half-depth hives, with your little toy frames, (pardon the expression—they seem just like that to me) are so superior to the full depth Langstroth hives and frames, why is it that only a comparatively few are using them? No doubt you will try to answer this by saying that your hive and shallow frame is new, and that the bee-keeping world has not heard the many advantages of this new hive and system. This I deny, for did not James Heddon adopt this same hive and system more than twenty years ago. Yes, he went so far as to take out a patent on this hive, and used costly cuts and drawings in all the leading bee-journals illustrating the many (?) advantages of this little hive and system. Yes, he advertised, using whole columns of space, pushed, boomed, did everything in his power that a shrewd, up-to-date business man could possibly do to push this hive to the front. He was shrewd enough, and of such prominence as a writer at that time that he managed to get in many full columns of advertising in the reading pages of most all the bee-papers. Now you say, "What has this to do with the shallow hive and system I am using?" It has this to do with it: If those "toy" hives and "fixings" were so much superior to the Langstroth hive and system, as you seem to think, why is it, after so much advertising, that so few of them are in use? The answer is plain to me. They did not prove to be superior in the hands of most bee keepers.

Your arguments imply that bees winter better in shallow hives, build up faster in the spring, etc., than in the full depth Langstroth hive. Pray tell us, Mr. Chambers, what possible advantage there is in having the brood-nest of any colony divided up into two or more parts by horizontal strips of wood—top and bottom bars of frames—towards keeping the bees warm in winter or of building up in the spring. I fail to see any of

the advantages you claim for the sectional hive and shallow frame, except these two points: They are light to handle and the combs of these little half-depth frames are easy to uncap. These two, being the only ones worthy of mentioning, are more than offset by their many disadvantages. In uncapping you have twice the number of frames to uncap and handle in taking them out and putting them back in the supers. It is the same putting in foundation, nailing up frames, etc. You've twice the number of frames to handle and nail up.

You say you do not handle frames, but handle hives in sections instead. This I'll admit to a certain extent. But there are times when you must handle frames, as in the case mentioned above, else they have frames at all. Just think of going into an apiary of one hundred colonies or more, where they were tiered up five or six stories with these sectional hives. They would have to be that to be equal to a ten-frame, three story Langstroth hive, and have to handle the frames of every hive. Oh, my, I am tired right now, just thinking about it.

Maybe you say that does not have to be done. But I say there are times when such a thing is necessary. Let us suppose a case of foul brood or pickled brood should get into an apiary. How are you going to detect it without handling frames?

I can truly say I in no way envy you the pleasure and satisfaction you get out of handling your bees on these little frames. I could give many advantages the Langstroth hive and frame has over those little sectional hives and shallow frames that I have not touched upon yet. But what is the use? It seems to me that the Langstroth hive and frame being the standard the world over, is sufficient evidence within itself to convince any reasonable mind of its superiority over all other makes.

CARNIOLANS VS. ITALIANS.

It would seem from the reading of Bro. Chambers' article that he is either jealous of those of us that rear and favor the Italian bee, or else he has some personal grudge against some breeder of this race of bees. Now, I have not said the Carniolans were not a good race of bees. On the contrary, I am favorably impressed with them, but I fail to see the many advantages over the Italians you claim, and some of the strongest points you make in favor of the Carniolans are the very things for which they are condemned by others; for instance, their breeding in season and out of season. Two years ago was a hard year on bees in this part, and more than once I had to draw frames of honey from my

Italians to supply my Carniolans with to prevent actual starvation. Why was this so? Because the Carniolans kept right on breeding as long as there was a drop of honey in their hives, while the more prudent Italians slacked up on breeding when no more honey was coming in from the fields. But last year was better for bees and the Carniolans were, with one exception, as good as the best Italians I had. But I can not say that they were any better.

This spring they are in the lead, so far as strength goes, but I do not expect to find them a whit ahead when time to extract comes, for swarm they will, in spite of faith, and this very disposition to swarm so much, and looking so very much like our native bees are two of the worst faults I find with Carniolans. I think you stand almost alone in your views with regard to the Italians being a weak, unprolific race. In fact, your views there are exactly the opposite of all the works on apiculture I have ever read. You should have remembered, too, Bro. C., in making remarks of that kind, that you said, in the beginning of your article that unsupported assertions expressing individual preferences were not worth anything unless supported by powerful reason and undeniable logic.

That sounds well. But let us here take a little review of your article and see if you have practiced what you preached.

You stated that my own personal opinion was not of special value in arriving at the truth of these interesting and unsettled questions as to the best race of bees and the best hive. That is true enough, but since you have filled six columns of space with scarcely anything more than your own personal views and preferences, are we to infer that they are worth more than mine, and that you have settled these hitherto unsettled questions. I admire your cheek, but pity your judgment if that is the case.

Now I come to that phrase of yours, "the unsupported assertions of himself and others." What does that mean? If I make a statement and quote others to the same effect it is not "unsupported," is it? unless you mean unsupported by reason and logic. If that is the meaning intended, the only supported assertion in your article where you refer to Messrs. Atchley and Benton is knocked out because there is no reason or logic used. If some other meaning is intended the wording of the expression is ambiguous.

Passing on let us observe how much, or rather how little the "powerful reasons" and "undeniable logic" are used in your article.

(To be continued.)

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.

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We also caution producers against using too large a package, as it will necessitate placing a follower in the back of the case, which often becomes loose and causes breakage and leakage to the honey in transit. This has been our experience in the past.

It is also advisable to nail or paste the trip sticks to the bottom of the cases, as it will prevent their sliding out of place, which often results in damage to honey.

What we want to call your attention to particularly is to have your honey graded the way it should be, both as to weight and quality.

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