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West Maitland, N.S.W.: E. Tipper, May 31, 1909

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THE AUSTRALIAN Bee Bulletin.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

Edited and Published by E. TIPPER, West Maitland; Apiary, Willow Tree, N.S.W.
Circulated in all the Australian Colonies, New Zealand, & Cape of Good Hope.

VOL. 18. No 2.

MAY 31, 1909.

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*The Australian Bee Bulletin*

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# "The Australian Bee Bulletin."

**A Monthly Journal devoted to Beekeeping.**

**Circulated throughout the Commonwealth of Australia,—New Zealand & Cape of Good Hope.**

**Editor & Publisher: E. TIPPER, West Maitland, N.S.W. Aus.**

**MAITLAND, N.S.W.—MAY 31, 1909.**

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Street, Sydney.

## **ANNOUNCEMENT.**

**O**WING to the severe illness of our Mr. E. Tipper, we approached Mr. W. Abram, of Beecroft, whether he will assist us in editing the "A.B.B." We are glad to announce that Mr. Abram has promised his aid.

Trusting that our readers will appreciate our choice and that the paper will continue increasing in favour.

"AUSTRALIAN BEE BULLETIN."

## **BEEKEEPERS!**

Whilst moving in the matter of uniting the fraternity, which takes a considerable amount of my time, I have now been asked to assist Mr. Tipper, and I have consented to help to the best of my knowledge and ability. Both concerns may be carried to success together; but in order to succeed in my humble attempt, I desire every beekeeper's help. It is a beekeeper's journal, and it is to the advantage of all if you contribute towards progress. Thus I invite you to set to work and write something concerning beekeeping. Every little helps.

As I am inexperienced in the new work, I shall be glad if you will kindly point out any error or mistake. I hope, however, that Mr. Tipper will soon be



restored to his former good health. In the meantime he has our sympathy and best wishes for a speedy recovery.

Yours truly,  
W. ABRAM.

## CORRESPONDENCE.

In submitting correspondence received by me regarding the formation of an organisation, I desire to state that I have many others who state their willingness to join; but simply say yes. In the circumstances a successful start is now assured, and I am submitting by circular a short set of rules, as also names for the executive. These live near Sydney; but they are only to carry out what the majority vote of members indicate. Mr. Niven and others, although hundreds of miles from me, express their views in conformity with mine.

Being pressed for time, I am unable to thank every beekeeper individually for his generous, straight and honest contribution to assist me—but not me—nay, the industry; and I take this opportunity to express my heartiest thanks to all, hoping that none will ever regret the help. Continue to help the advancement of our industry, and success is ours. We have neglected it too long, or rather, we have left it in the hands of those that had not our interests at heart. Have faith and trust one another of our occupation; but beware of those others interested; their interests are not ours. Beekeepers are not such duffers as others want to make them to be. At any rate, now is the time to prove it.

W. ABRAM.

Border Town, S.A.

Mr. W. Abram,

Dear Sir,—Your circular to hand, also other matter, and thanks for sending same.

About forming a beekeepers' association, I think it is badly wanted, especially after your report in the "A.B.B." of April 30th. No wonder you and your sons left, as we do not want meetings of that sort. When we have beekeepers' meetings, let it be ruled over by men who are depending on their bees for a living, and not a lot of business men of other trades. I am quite willing to join if a *Beekeepers' Association* is formed, as what will help one state will help another. I would not be able to attend in person at any of the meetings as I am a long way from N.S.W.

Trusting that you are well.

I remain,  
Yours Truly,  
A. R. BELL.

Beeville,  
Howell Road,  
Inverell.

Mr. Abram,

Dear Sir,—I read, with interest, your letter to beekeepers in the April number of the "A.B.B." I was surprised to see the names of no beekeepers on the committee. When beekeepers' associations are formed in this manner, I think it is high time for beekeepers who are endeavouring to make a livelihood by beekeeping to look after their own interests, which I consider we are quite able to do if we go hand in hand. I am ready and willing to join a real live beekeepers' association; but I would like very much to see you president of the same. I feel confident that you could handle the reins well. I give you credit for leaving the meeting when you saw how things were carried on. I quite agree with you re members submitting their votes by post, as a large number of beekeepers cannot attend in person.

I have had a fair honey season, although a short one. I extracted 550



60 lb. tins of honey. I have not sold much yet. I am holding it for 3½d., as it is first class honey.

I remain,

Yours faithfully,

JOHN PENNINGTON.

*Re association.* I'm a member of the Stawell and District Association, and an ex-member of the V.A.A. Do you mean to form a N. S. Wales association or a Federal Association. If you mean Federal, I'm with you. If you mean N.S.W., well I would like to see all beekeepers in N.S.W. form an association, as they must find a benefit by so doing, if it is only to bring pressure on Parliament to frame laws for their benefit and preserve the timber from destruction.

J. R. MORGAN.

Dadsville, Vic.

Elsmore.

Mr. W. Abram, Beecroft.

Dear Sir,—I have your favour enclosing ballot paper. It goes without saying that I am in favour of a beekeepers' association; but not in favour of *two*. It is unfortunate that *bona fide* beekeepers are not better represented on the committee of the present association; but I don't think it is in their best interests to form another association antagonistic to it—better I think to strengthen the present one so that it *shall* represent the majority. I should be sorry if beekeepers were deprived of the services of some of the present officers just because they live in or near the city. We must have some one there to look after our interests.

Yours faithfully,  
F. J. McILVEEN.

Trunkay.

The Editor "A.B.B."

Dear Sir.

I notice in your issue of April 30th, that Mr. Abram has started the ball rolling in the right direction, in connection with the formation of beekeepers' union.

Mr. Abram is, I think, just the man to get this important business going, and beekeepers of this State have an opportunity now of forming themselves into a strong union, which will be a power of good in every way towards improving the position of the *bona fide* beekeeper.

Last month 1½ tons of prime honey (western), went from here to a Sussex Street merchant, and realised according to the merchant's showing 2½d. and 2½d., the major portion of course bringing 2½d.; but the tare deducted reduces the price to 2d. and 2½d. Now I would like to ask, is there any industry which has to submit to such gross unfairness in the matter of tare as the honey man? Yet we go on allowing strangers to handle our produce, instead of distributing it through our own agency. I submit that if a client purchases a tin of honey, he should be compelled to pay for the exact nett weight; but as it is now, according to our Sussex Street friend, the purchaser is allowed for the honey, which does not drain from the tin. So, therefore, the better and thicker the honey, the greater the tare. Another question is, what becomes of the honey which is marked up against us as Tare?

The Trunkay Bee Farmers' Association is with Mr. Abram, and they have directed me as Secretary to communicate with him, with a view of assisting to finance his scheme for a start.

I am,

Yours faithfully,

EDGAR F. HUNTER.

To the Editor "A.B.B."

Dear Sir,

I am very pleased to see by last "A.B.B." that Mr. W. Abram is making an effort to start a beekeepers association on a better system than those of the past. For many years my idea to carry on the work of a beekeeper's association is much on the same lines as those put forward by Mr. Abram. In forming the executive committee it should consist of Beekeepers that will



pledge themselves as willing to attend, if necessary, two meetings during the year; five would be enough as a committee; if there should be any difficulty in getting that number, the work could be done very well by three: a president, vice-president, secretary and treasurer to be one. I would be in favour of the executive to meet early in September each year; the annual meeting, election of officers, conference, &c. to be held during the Easter holiday in Sydney.

I do not approve of the idea to think that men who have no stake or very little in beekeeping would lose time and money looking after our affairs; it is expecting too much. If we want the interests and matters appertaining to beekeeping looked after, we must do it ourselves. Those beekeepers having the largest number of hives, providing they are qualified, should form the executive. In working to benefit themselves, they must also be working to the advantage of those beekeepers with a less number of hives. In this State we have men that are large producers of honey, and well qualified to help in working up an association as it should be; I hope they will come forward and offer their service. I am willing to give any help I can, but would very much prefer to see younger men in the front.

There is no doubt the cause of failure in the work of beekeepers associations in the past has been through beekeepers living a great distance from one another and unable to attend meetings.

The suggestions put forward by Mr. Abram, a circular to each member, and vote by post, should overcome the difficulty. I would like to see an association with a large roll of members; but hold the opinion that all questions of vital importance to the beekeeping industry should be decided by beekeepers only.

Hoping all interested in beekeeping will give their help to build up a strong association.

With best wishes,

W. NIVEN SEN.,  
Sweet Home Apiary,  
Eugowra.

Gunnary.

To Mr. W. Abram.

Sir—Having read your letter in the last issue of the "A.B.B.," re a beekeepers' association, I entirely fall in with your views of the matter. What we want is an association of beekeepers; not one of parasites, who know absolutely nothing about the mysteries of a beehive.

I am only a novice at the game myself, but am ever ready to learn what I can. I would willingly join a beekeepers' association and give it what support I could, providing it was composed of beemen and those interested in the industry; not ones like you said were elected at that meeting the other day in Sydney. What use would such men as them be to look after the interests of the beekeeper. Ifancy if we confer together, we can look after our own interests better than outsiders. I intend to go into the business on a larger scale. I only have at present about 60 hives; but I have partly agreed to buy another apiary from a man who, owing to old age, is going out of the business.

Last year was a very good year with me. I extracted about 3 tons of honey from 46 hives, my largest yield from one hive being 300 lbs. I consider that very fair for an amateur. This season has been very poor here; practically no honey.

Again hoping ere long we will have a strong beekeepers' association. I will draw my letter to a close. Trusting I am not encroaching too much on your valuable time,

I remain,  
Yours etc.,  
J. GORHAM JUN.



Mr. W. J. Benson writes :—In reference to a bee-farmers' association, I wish you every success. It is by the united actions of *bona fide* beekeepers that our business will be made what it should be. Other trades people have their association, and why not bee-farmers. There are scores of others who keep bees and have other means of making a living besides these, who ruin the business, as their product is sent to market in any slipshod fashion, and they do not care what they get so long as their product is sold. I am willing to do all I can for a beekeepers' association. I would not join unless it consists of practical bee-men. There are many matters in connection with the business that should receive attention. I must congratulate you, Mr. Abram, for your outspoken views in last issue of the "A.B.B."

Mr. John Smith says: We should have an association, but it should be composed of beekeepers that know something about the requirements of the industry.

Mr. Hunter, Hon. Sec. T.B.A. writes :—Greatly pleased to see yours headed "Beekeepers Beware." You have, indeed, struck my key note too. I am calling a meeting of our association, representing close on 3000 colonies, with a view of joining with you and assisting you all in our power. We hope to represent 5000 colonies next year. Trusting you will be inundated with letters from beekeepers relative to your project.

Mr. N. C. Sorensen is in favour of forming the association, providing it does not prevent him doing his business in his own way. He has always been getting fair price for his honey.

Mr. R. W. Pierce—I think a purely beekeepers' association is needed, and I approve of your suggestions in the "A.B.B."

Mr. E. Fritz, Woodstock writes :—Regarding the new beekeepers' union you intend to bring to life, I have lately

given it my thoughts; but I am sorry to say that I have little hope that the members for continuous time will have interest to keep the union in flourishing conditions :—first, beekeepers live too far apart; second, beekeeping is an occupation which leaves them in poor circumstances, consequently the specialist has not the cash for such outlay, and the mixed farmer does not care a fig how things go. The same applies to your intended assisting the editing of the "A.B.B." You are too straight. What your acknowledged and experienced writing on bees, etc., gains you may by your straight going as editor lose. Result: Plenty of work, expenses, irritation and anger. You cannot serve two masters at the same time. But I am with you in your undertaking to form a union.

Mr. W. E. S. Thompson is quite in favour of the beekeepers' association, as he considers that bees and the industry want protecting, and also our timber, as we depend on the forests for the bulk of our honey crop.

Mr. J. F. Munday writes :—I consider it advisable for a beekeepers' association to be formed. I consider it necessary for the advancement of the industry. Although Sydney is too far away for me to attend meetings, yet I would take much interest in the proceedings transacted thereat.

Mr. W. Muir is in favour of forming a union by men that have experience in beekeeping, as when we meet we could talk about bees; but if they knew nothing about bees there would be no interest. Would pay a subscription of 5/- a year for a start. Hoping that my help can help you to get it going.

R.H.G., Clarence Town.—The past season has been very poor. Next promises to be better if we get rain soon.

G.F.S., Okaiawa.—The old gin case style of keeping bees is prohibited by the N. Z. Government. It is high time they did



so. It keeps down disease, and the bee-moth, being the large moth, which is very destructive. Very few people around here have Italian bees, having chiefly black bees. Most people who go in for beekeeping just keep a few as a bye product. This is a great place for honey production, especially for quality, being an abundance of white clover, and it always finds a ready sale at 4d. per lb.

### PROPOSED RULES (subject to alteration).

#### STYLED: THE COMMONWEALTH BEE-KEEPERS' UNION.

1. Objects and aims to aid and assist beekeeping in all its branches.

2. Members are beekeepers, or have particular knowledge of bee-culture.

3. President, secretary, treasurer, and two other beekeepers form the Executive. to carry into effect to the best of their knowledge, all matters submitted to them by members regarding union business.

4. Vital questions or subjects shall be decided by members voting per post.

5. Subscription to Union 5/- per annum, dating from 1st of July each year, payable in advance.

6. All expenses, except time, incurred by any of the Executive on behalf of the Union's business to be paid them out of the funds of the Union.

7. Members agree to abide by majority rule.

8 All correspondence to be addressed to the president for the time being, until otherwise arranged, who shall publish in the "A.B.B." (or send each member, not a reader of the "A.B.B.") periodical reports of the Union's Executive works.

9. Members are requested to submit to the Executive matters which they desire to be decided on by vote or referendum.

### SUGGESTED EXECUTIVE. (Alphabetic.)

ABRAM, W., Beecroft,

BRANCH, J. J., Enmore,

LORD, H., Technical College,

PARRY, J., Narara and Parliament House,

PARKER, D. W. Turramurra.

N.B. You are requested to strike out any name you object to, and submit another instead, or add thereto others, and to state opposite each name: president, secretary, etc., then address to me at *your earliest*, as it is intended to publish results in the June "A.B.B."

If you enclose postal 5/- note for membership, I will hold myself responsible for same and remit to the duly elected treasurer.

Results of voting and all further information will be published in the "A.B.B.," for which reason it would be advisable to subscribe thereto. The "A.B.B." is now being edited by W. Abram.

### BEE-SONG

By THERON BROWN IN "GLEANINGS."

I suck the dews of May and June  
When blossom-time is young;  
All summer long you hear my tune  
In spicy gardens sung;  
September days I swim amid  
The buckwheat's milky foam,  
But—never lost and never hid—  
I know the bee-line home.

Sometimes where plum or peach begins,  
To blush I love to stay,  
Or pasture-mint or thistle wins  
My flight a mile away.  
A thousand circles I describe,  
Yet never where I roam  
Forget my master and my tribe,  
Nor miss the bee-line home.



Praise pinks and milkweeds to the bee,  
 Wild rose and goldenrod,  
 Or call the fragrant basswood tree  
 The honey-maker's god.  
 But banks of bloom could ne'er delay  
 The call that bids me come,  
 Nor tempt the hive-born heart astray  
 That knows the bee-line home.

There brim the crystal nectar-cups,  
 The pollen-cakes are clean,  
 There, soothed with tender music, sups  
 The brown-eyed castle queen.  
 What wonder that I longing seek  
 My walls of flowery comb  
 And quit the balmiest posy's cheek  
 To wing the bee-line home?

Ye bees that walk on human feet,  
 You hurry everywhere,  
 But straight for you a shining street  
 Leads homeward through the air.  
 To find it in your evening flight,  
 Unlost amid the gloam,  
 Have you the light that burns at night,  
 And shows the bee-line home?

### ON BEES.

The size, formation, and variation of climate of the State are of considerable advantage, as thus some districts are favoured while others are not. Take the coastal district for instance. Had every other part been as this there would practically be no honey in the market; but some places fared better, and thus honey is obtainable, though price is advancing and likely to continue rising. There is little chance of any remaining on hand ere long. Victoria is also short of supply. This shows once again that beekeepers need not go begging with their product, especially as pastures are reducing; and owing to bad seasons, bees are becoming less. The coming winter may tax bees considerably; therefore, every beekeeper should do his best to carry them safely through. There are better times in store for both bees and keeper. Such has been the experience in

the past. Why not in the future? Thus save the bees even if feeding is necessary. It will repay you. In the meantime, make arrangements for the future. At present, the producer has all the care, work and risk to bear; whereas the dealer reaps as much as the producer by disposing of the product. The consumer pays a fair price—let the producer have a fair return for his trouble. That can be attained by combined action. The producer is first; the dealer, secondary consideration. Without the first the other has no standing.

W. ABRAM.

### Size of Bees.

Some time ago not a little was said as to getting bees of larger size, in the hope of getting larger crops of honey. Some, however, were of the opinion that increased size does not necessarily mean increased crops. Prof. Graf (Prak. Wegweiser) says that, just as it happens among men, that men under size often accomplish the most, so it is among bees. He has been breeding from the best, and it so happens that his best bees are under the average in size.

### QUEEN-EXCLUDERS.

WIRE V. ZINC; WHAT CAN BE EXPECTED OF WIRE EXCLUDERS?

BY E. D. TOWNSEND IN "GLEANINGS."

For the last few years, in a part of our yards we have been using zinc excluders to quite an extent in the production of extracted honey, and we would use them on all of our extracted honey colonies were it not for the fact that a season of excessive swarming comes about one year in three, so that at our outyards, where no one is present to hive the swarms, there is considerable loss, even when as large a hive as a 10-frame Langstroth is used for a brood-nest. The loss merely of the swarms is not the



total loss by any means, for bees when preparing to swarm do not work with the same vigor as do those colonies that do not acquire the swarming fever during the honey flow, but keep on piling in the stores. These years of excessive swarming have caused up to work out a system of manipulating our upper stories so as to get along without excluders, and still have but little brood in the upper story at extracting time. This system, however, has been described in previous issues so it will not be necessary to go over the same ground again.

We do not think there is much difference in the amount of honey stored, whether an excluder is used or not, with the exception, as I mentioned before, of the years when there is excessive swarming. It is true that there will be a little more honey in the upper stories where no excluder is used; but on the other hand, there will be more honey in the brood-nest when the excluder is used. This extra amount of honey in the brood-nest is the principal cause of the swarming fever, because the queen is crowded. This is especially true if the bees are three-banded. Hybrids carry their stores above more freely than the pure Italians.

The zinc queen-excluder really amounts to a horizontal division-board; and although the workers may move back and forth from one story to the other at will, still there is a division between the two parts. As every one knows, when a queen-excluder separates two stories the bees will build queen-cells and develop a laying queen in the upper story if there is brood present and a fly-hole provided so the young queen can take her mating flight; and if the bees are let alone, two normal colonies will be the result, both of which use the one common entrance.

This proves to me that the bees regard an excluder as the top of the hive; but when they get their hive full of honey and brood they will crowd above and store honey in the upper part, just as

they would store honey in combs hung in a portico; and as long as the honey keeps coming in they might store nearly as much in a portico in front as in the story above. The fact that more honey is stored in the brood nest under an excluder convinces me that, if we put enough obstructions between the brood nest and the surplus receptacle, swarming will be the result in every instance. At any rate, about every third year, as I said before, we have as many as twenty per cent of the colonies swarm where excluders of the zinc type are used, even though there are plenty of drawn combs above.

The new wood wire excluder has a little more opening than the zinc, but it is a question in my mind whether there are enough more openings to make any difference in the amount of honey stored above or in the number of swarms that issue.

As I mentioned at the first, it seems to me that we do not realise the full value of a wire excluder in the drone-trap entrance-guard, or even in the wood-wire excluder. I think we should use an *all-wire* excluder. With such a honey-board we should expect to find no congestion of the brood-nest caused by the reluctance of the bees in working through the excluder, for it looks to me as though there would be so very little obstruction that the results would be the same as if there were no excluder at all between the hive and upper story. A woven-wire construction, so to speak, the bees would not notice, and it would be so open that they would cluster over it as if there were nothing there, and there would be no cells built above it either, even though there were young brood in the upper story. To my mind this would indicate that the colony was in a normal condition as a whole; in other words, that it would be the same as though no excluder were used. Under these conditions I think there would be no more swarming with the wire excluder than without if the proper size of brood-nest were used.



## TRANSFERRING FROM BOX HIVES.

A QUICK WAY OF DOING THE WORK  
WITHOUT GREATLY DISTURBING  
THE BEES.

BY J. J. WILDER IN "GLEANINGS."

Prepare as many hive-bodies, using full sheets of foundation in the frames, as there are box hives to be transferred; and in early spring, or as soon as the first honey-plant begins to bloom, turn a box hive so that it rests on its back. Then, with a hatchet or ax, split the front side, which is now the top, in pieces about 2 inches wide, and remove the one which has the least comb attached to it, working it out carefully so as not to tear up any comb. A long-bladed knife can now be used to cut the comb from the rest of the strips, and remove about 12 inches of the wood in the middle, leaving just enough at either edge so that the prepared hive when set on top will have a good level foundation to rest on. If the box hive is narrower than the new one, nail straight-edged strips on either side, flush with the top.

If the bees have not rebuilt the comb in the top of the box hive since it was robbed, fill the space with straw, hay, or burlap sacks, or any thing the bees will not gnaw away. If this is not done the bees will fill it with new comb, and the work in the new hive will be retarded. If the comb in the box hive was removed to a depth of over 6 or 8 inches, and not rebuilt, reverse the hive so the top will be about where the entrance was, and remove the cover and nail it on the bottom end so the end of the new hive will rest on or against it.

The front end of the box hive (the bottom when the hive was standing) can be left open; but the rear should be closed so no cool draft can pass through it during changeable weather.

Now set the prepared hive-body on the box hive, making sure that there are no cracks at the sides or back, and place a short piece of plank over the portion of the box hive in front, which the new one does not cover. It is best not to close up the opening in front to a small entrance, unless the apiary is large or robbers bad; for the queen would then occupy more of the old comb, and delay the establishing of the brood-nest in the new hive, which she should do as soon as the foundation is sufficiently drawn out. After all the box hives in the apiary have been thus treated, and work is under headway in the new hives, put on supers as fast as they are needed, so the queens will not be crowded out of their new quarters.

An apiary in this condition can be operated for honey or increase, and better stock can be introduced at the same time, and at the close of the season or late in the fall all the bees should be driven up, and the new hives set down on bottom-boards. If any bees remain in the box hives they should be jarred in front of the new hives, and the old hives set a few steps away. As soon as the bees remove all the honey from these old hives they should be taken away and the comb rendered into beeswax. At this time of the season there is little if any brood lost.

If colonies in box hives are weak at the time of transferring, it is best to unite several of them, which can best be done by preparing one hive as above for every two or three hives to be united. Then all colonies should be disturbed so the bees will fill themselves with honey, and cluster on some part of the hives, when they may be dumped into the one prepared for them.

I have been troubled but little with swarming in apiaries managed in this way, and the colonies have not failed to harvest a good crop of honey when seasons were favourable.



## IS DENSE SHADE OBJECTIONABLE.

BEES RETURN TO HIVES FROM MILLER  
ESCAPES; HOW TO GRADE  
HONEY PROPERLY.

BY J. C. DAVIS IN "GLEANINGS."

I thought that the shade might be getting too dense in my apiary, so I trimmed the trees. At the time I did the trimming I was not sure that I was doing the right thing, and I am not sure yet whether the shade was any disadvantage. The best colony in this yard in 1906 was No. 6 in the back row, where the shade was the most dense. The same colony was the second best in 1907. There were about 150 colonies in September, 1907. The colonies in the front rows get more sunshine, and they winter (or rather, spring) a little better, and the surplus averages a little more from them. Since doing the trimming, however, there is very little difference. The trees are second-growth oak, hickory, and elm.

I use both Porter and Miller escapes, and I find them both good. If I have plenty of time I use the Porter if not, I use the Miller. I have watched closely, and I think that the bees all return to their own hives from the Miller.

I always sell honey by the case, and the grocers prefer to have it that way when *so graded*. They often sell other ungraded honey by *weight* at the same time.

## PIONEER BEEKEEPING.

BY J. J. BRANCH.

The swarming of bees is and has long been a subject of keen interest to the keeper of bees, and to those who have become interested as the result of seeing that event and the making of eager inquiries of those more or less qualified to give information upon that subject which is of such importance to the keeper and the

master of bees, for there is or should be a clearly defined line between the mere beekeeper and the apicraftsman.

The Rev. Emerson T. Abbot, a prominent American apiarist and lecturer on bees and poultry at some of the agricultural colleges in North America says in one of a series of specially written articles on "Production of Comb Honey": "It is the swarming bees that gather honey," in protest against the popular craze for prevention of swarming. But that again implies a knowledge of how to hive and treat a swarm and need not be further discussed here.

The earliest recollection of bees that I have was and is of a swarm that alighted on a man's head and face in Horton Street, Port Macquarie, when I was a very small boy indeed. They completely covered his face and he had to be led to where he had already placed the new gin case hive ready for their reception. His name was James Quick, and he was the groom, boots, &c., &c., as well as gardener and beekeeper at Doyle's "Speed the Plough" hotel. He kept the bees on the headlands of the garden just inside the fences on the adjoining allotment to the hotel, and had started to ring down the swarm with the house dinner bell with the result of bringing them down upon his own head and then being led to the new stand, and the bees being hived without accident to him or them, though he had to lift the bees of the swarm clear of his mouth and nose in order to speak and breathe. I clearly remember his lying down in front of the box or the ground and seeing the bees run into the new home prepared for them. But the history of bee-craft in the Port Macquarie and Hastings River Districts as collected by me from time to time, and a variety of sources antedated that event by many years.

I have it in memory that a footnote in "Langstroth's Hive and Honey Bee," revised by Dadant and Son, tells that a single colony in the neighbourhood of



Sydney, Australia, increased by the process of natural swarming to three hundred in three years, a statement which our anti-ringbarking friends will probably be quick to use in the interests of pasture preservation, for such an occurrence would be impossible in the present time and circumstances.

If your readers can imagine themselves present and seeing some six or eight colonies of perhaps that abovementioned three hundred loaded on the North Coast Railway of that period—a bullock dray—one fine day by a few uniformed beekeepers (for beekeepers wore uniforms in those remote days), but alas, those uniforms were not the badge of accredited apicraft from across the ocean, but were rather the Hall Mark of discredited citizenship, for they were probably plentifully dotted with that mark of infamy, the broad arrow, and perhaps the wearers move to the clink of leg-irons and had their motions generally ordered and directed by another uniformed squad in the shape of a military guard, armed with muskets and fixed bayonets, and who thence carefully escorted them along the route to one of the ferries at the Hawkesbury River, thence to Raymond Terrace, thence via Gloucester, along the route over the intervening rivers, creeks, and the thousand and one other impediments till that slowcomotive, with its precious freight of bees drawn by Bailey and Spot and Smiler and Jumper, and their bovine companions in toil landed safe and up to schedule time in the Government Gardens at the "Historic Port," and were duly placed in position to form one of the State, or rather Crown apiaries of the continent of Australia, where they were in full swing in 1850, according to one of the "old hands" who had to do with them and one gardener whom I knew for many years.

If those bees were really moved by land as related to me, and not by water, what an object lesson on the removal of bees that trip from Sydney northward

furnishes to any who can imagine the state of the roads without formation and the rivers and creeks without bridges as we know them now. Whether the bees were closed up all the time, or only while travelling and in actual motion, or what special treatment they had, I know not; but of this I feel sure, that they had not the special ill-treatment that some bees get in these days of advanced beekeeping, and please further note the drays of those days had no springs and no brakes as we know them now. The brake of those days was often a "lock chain" applied to the spoke or fellow of the near wheel, or a sappling spar rove through the spokes of both wheels under the dray bottom, or as was the case in the wool-drawing teams in my boyhood, a pair of exceptionally large and heavy "pole" bullocks were provided with saddle and breeching, and then they were often helped by the addition of a "drag" which consisted of a spar sappling cut down and swung by its butt to the axle bed, the head trailing behind and helping to steady the drag with its load of a bale to a bullock over any abrupt "pinch" or down a long hill.

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### BEEKEEPERS BEWARE.

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Friend Abram asks "Have you any better suggestion to make?" The "you" being applicable to any reader interested in that sense, I crave a right to speak suggestively out of observation and some little experience.

Party interest rests necessarily upon individual interest, that is self-interest. Rather than attempt to close out those who are not directly honey gatherers, I should suggest that they be warmly welcomed as mutual workers because of their self interest. The presumption that the man with the goods to sell will force the market and crowd out the experienced legitimate beekeeper is a bogie. Other natural causes regulate operations. No business may long exist save run upon legitimate lines. The business man only



seeks to get out the best he can of what is going, and his help in developing a market should not be despised.

May I ask in this relation is anyone we know has helped more than A. I. Root and his successor in developing the honey business? Do we not all practically acknowledge that most of what we know comes from him?

The business man succeeds by virtue of the nervous restless force which compels him—a quality which may be altogether absent from other men fitted well for work in other directions. Business men succeed solely by possession of qualities lacking in other men. No amount of capital is equivalent to the inherent nature force within a man. In precisely the same way not 10 per cent. of men beginning as beekeepers succeed because lacking the necessary elements of success; but the same is true of all effort. Statistics will show that about 10 per cent. succeed in any profession calling for reflection and other powers of mind—hence we have with us so many who call themselves “workers” who remain at dead level.

If absence of beekeepers from meetings called is matter of surprise the presence of others interested should be a matter of congratulation. From what in the years I have observed, I should say efficient help would be forthcoming in this direction and by virtue of community of interests with all.

Individual beekeepers are not often “willing and capable” to spend considerable time “in the interests of other beekeepers,” but the other fellow touches them all.

L. T. CHAMBERS.

[The letter by Mr. Chambers, will interest beekeepers because it shows what interest the seller of the product has, namely: to get the best he can of what is going. He is quite correct that my invitation for better suggestions applies to him, and sundry. The point now is—has he succeeded to make a better suggestion? I fail to see it. Beekeepers were asked to try to see that they manage their own business and get a fair return for their money invested, time and

labour spent; they are the primary producers; the seller is a secondary consideration. Because many have not carefully studied or had not long enough experienced the many difficulties of bee-craft, they rather aid the other party by disposing of their product at what is offered them, and the legitimate beekeeper suffers thereby. When adverse times arrive the inexperienced beekeeper is forced out. Not so the interested party. He got the best going, and he knows that there will be others to help him on. It does not trouble him how many may go to the wall so long as he can get the best of what is going. How nicely Mr. Chambers puts it! But the *bona fide* beekeeper also suffers; and to obviate this is his aim.

What has A. I. Root and his successor done in developing the honey business in Australia? With an eye on business, American firms have and are pushing their wares. If that means helping and teaching beekeeping, then Mr. Chambers may be pardoned for bringing this matter into discussion.

Mr. Chambers' observations are not mine, and I leave it to beekeepers to decide to or fro. If he considers the presence of others—and voting on bee matters—a matter of congratulations, he is welcome to it.

It is hardly fair for him to say that individual beekeepers are not willing and capable to conduct their industry's business. What has the other fellow ever done to aid and assist beekeeping?]

W. ABRAM.

## SEARCHLIGHT PARS.

BY DRONE-EYE.

The “A.B.B.” account of the Sydney Show, though brief, is to the point. The comments about the “Judging” much so. A press review of the awards and results would perhaps have the effect of making persons consider the responsibility as well as the “honour” of these positions in the future more than in the past. The practice of recommendation by stewards which the Government by sub-committee system that the R.A.S. appears to patronise and encourage notwithstanding.

Mr Abram's stirring appeal to the beekeepers, places one public aspect of the situation clearly and concisely before



them together with their duty to themselves and then calling: "I make this appeal on behalf of the industry with which I have been so many years connected and which I helped to build up." Every beekeeper who knows what that means, will respect the strength and modesty of that statement of the case when he recalls that Mr. Abram brought with him to this state, frame hives and Italian bees—Read in the light of the statement, page 297, "Langstroth Revised," that "Italian Bees and moveable frame hives are now a *sine qua non* of success." How much did that advent add to the bee-wealth of this State and country?

The only reply the writer can imagine if the temper of legitimate bee craft be correctly gauged will be a prompt and hearty acknowledgement of his line of argument and invitation to form a Beekeepers' Union, and present a strong and temperate front to all encroachments. "Beekeepers need no help."

It seems to me that Dr. Miller and his help took great pains with their "put up plan," and "foundation plan," and "two brood plan," page 6, with the only apparent object of preventing swarming by hindering the queen from laying in the brood-room for ten days.

But "I don't know," and as they got the honey, there may be more wisdom than appears at sight that "I never argy agin a success, &c;" but at a glance it seems to me that hive was at least two brood combs too small for such a season. How about a "Jumbo" or one of those Dreadnoughts? Father Dadant advocated so powerfully some years back they held 11 large Quinby frames, 18 x 11 in., when the dummy was replaced by a comb.

That Pryal Queen system, so strongly emphasised by Mr. Alexander, did not pan out the copper bottomed 18 carat jewelled in tin hole success in the hands of this scribe a dozen years or more back, when tried in a small way. One thing now recalled is that the bulk of the

stores collected went to the side of the excluder that held the stronger colony. Like that tin super, it may be a success only for "every one who knows how to use it." Memo: Try again.

Page 22 announces the severe and serious illness of Mr. Edwin Tipper, of this journal, and the consequent distress of his family. All beekeepers of all ranks will join in sympathy and regret at the circumstances of Mr. Tipper's illness.

At the recent exhibition in the Town Hall, Sydney, by the Women's Realm Guild, there was said to be an exhibit described to the writer as a Model Bee-farm, illustrating "What to do with our girls." In the writer's experience in that line, the principal occupation would be to get the bees out of their hair, and next blue bag the stings. But seriously, I have seen a woman who could and did hive a swarm—the nearest approach to hornets of anything I have met with; and, to make the case more difficult, the swarm alighted on an old stump and had to be brushed off to the ground, and run in with not an inch of level ground round it upon which to set the hive, and a white ant nest on top of the stump.

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### BEEKEEPERS' UNIFICATION.

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Now is the opportune time to evolve a scheme. In the near future, and especially in prosperous seasons matters will present themselves, which it would be well to be prepared for. Thus I am going to describe more fully how beekeepers might work in unionism for their and the industry's welfare. At the same time I wish to add that my scheme may be imperfect; but it may lead to devise a plan nearing perfection, and I want every beekeeper to assist.

In thickly populated countries, associations and affiliations may work admirably; but not in Australia; we live too far apart to meet often in committee, conference, etc.; therefore, other means



should be adopted in which distance plays a trifling factor only. The most effective seems to be by either circular or publication, and members voting by post. I am going to try and arrange with the "A. B. Bulletin" to publish action and results. In this way all are having an equal privilege though living hundreds of miles apart one from another. Associations on usual lines have not given satisfaction as we have repeatedly experienced, because beekeepers had little say in the management, thus the lack of encouragement to join. This would be different under an entirely new scheme.

The first and most important point to settle would be the election of a small executive, able and willing to undertake the sifting of correspondence; shaping of formula on which beekeepers shall express their views or votes, and to publish the results so that every member shall know every fact. The task may prove a very arduous one, probably a thankless one; but is it not worth trying?

When the executive is decided upon, there remains the drafting of a few rules for guidance, the fixing of subscriptions, etc. The executive, consisting of president, secretary, treasurer, and a committee of two or four should be sufficient. Their out-of-pocket expenses on behalf of members should be paid out of subscription, and in order to reduce expenditure, I deem it advisable that only the president, secretary, and one or two of committee represent beekeepers on deputations, etc., unless other members wish to be present at their own expenses. But the executive must have your votes to present to the authorities, thus presenting your views, not theirs. It may take a little more time to obtain members' votes, but it is much more satisfactory that every member should have a voice in such matters. It is a fallacy to suppose that a large personal representation can achieve more than a small one of one or two, so long as the few can show they represent the many. It would, therefore,

be expedient and economical if the deputants lived near Sydney, since it must be patent to all that the metropolis is the centre of action. It would be inconvenient and expensive for beekeepers living hundreds of miles from Sydney to come to the city. But as the concern grows, so may deputants be appointed in various districts to whom members make their communications and who submits them to the head. Thus a regular network could embrace all Australia and every beekeeper be represented.

With this far-reaching object in view, I would like to see this State's beekeepers united, and then to unite all Australia in the one concern. For this reason I would suggest that the new organisation be styled:

THE COMMONWEALTH BEEKEEPERS'  
UNION.

Under this heading, beekeepers from the other states may join from any time they please. The word "Union" seems more appropriate. An association is governed by a committee or council. The committee of a union has to consult its members on all vital questions. This is how beekeepers should act.

Now a few words as to rules. These are, so far as I have observed, of little other value than a sort of guidance. Honesty and fair play is the best foundation in such matters. I believe the fewer and plainer the rules the better. With time, experience, and development additions may have to be made. At present, it is only necessary to state the subject, the conditions, subscription, etc. Thus:

1. Its aim and objects are the encouragement, development and assistance of bee-culture in all its branches.
2. Members shall be beekeepers, or have been beekeepers, and shall abide by majority rule or vote. (N.B. Non-beekeepers may join, but shall have no vote in matters concerning beekeeping.)



3. The executive of this union shall consist of president, secretary, treasurer, and a committee of two (or four), who shall undertake to the best of their ability, to carry out the aims and objects of the union (as designed previously).

4. All communications shall be addressed to the president for the time being.

5. Every member shall have equal rights and privileges as per rules aforesaid.

6. The executive shall be compensated for expenditure on behalf of the union.

7. The subscription shall be 5/- per annum, payable in advance.

8. As the publication is to be through the "A.B.B.," members of the union should be subscribers to the journal.

If the foregoing suggestions approximately meet with your views, you have a scheme to go by, and I believe it is workable. The main question then is who is to be the executive? Now, from the foregoing you may assume that I covet and worked for an important position in this concern; but that is not so. I feel that for my health's sake I am already doing too much, and therefore I shall be glad to see someone else, whom you please, to be appointed; but I will, nevertheless, assist to the best of my ability. Whosoever you appoint should have the welfare of the industry at heart, and be possessed of your entire confidence. The secretary need not necessarily be a great beeman, so long as he knows the work and has the will to work for the benefit of all. The treasurer has just to know his business. The committee should consist of reputed beekeepers.

Now you have a fair outline of my views, and if others can submit something better, I shall be the first to stand corrected.

In concluding I may remark it must not be thought that a scheme could be evolved which would give absolute satisfaction to everyone, as different minds have different views, and in the best of circumstances, there will always

be a difference of opinion. The main factor is that a majority be in accord, and the minority see that the majority is strong enough to rule. Beekeepers ought not to assume that anything out of proportion can be attained so soon as a start is made. If unification can be accomplished within three to six months, a very great deal will be achieved, and other matters can then be dealt with as they are brought forward by members.

W. ABRAM.

Italian Bee Farm,  
Beecroft, near Sydney.

### SHOULD BEEKEEPERS SPECIALIZE?

BY LEO E. GATELEY, IN "AMERICAN  
BEE JOURNAL."

Knowing that in all lines of endeavour the highest success has been reached only through a close concentration of purpose, and because, personally, this has been found best policy, I have always, at the risk of being deemed an inconsiderate enthusiast, urgently recommended specialty for all so situated as to be able to avail themselves of the advantages such a procedure affords.

Not unlike, perhaps, the majority of those now entering the business, I was at the time when my interest in bees became aroused, engaged in general farming. Only after the bees began making a more satisfactory showing than the other branches of my work, did the production of honey become my specialty. Considering this fact, it is hard for me to believe that I am making any monumental mistake in becoming optimistic regarding the future of apiculture as a vocation.

Though this is hardly a suitable occupation for those seeking unnaturally large and immediate financial profits, still, if intelligently followed, it will in many localities be found as remunerative as any business of similar nature. It requires, however, a steady hand and



a complete knowledge of every feature of the work. Being qualified for the business, if the locality proves good, the remuneration is sure after a sufficient number of colonies have been acquired.

The number of colonies necessary to insure the beekeeper a living income, depends upon the man, upon the methods employed, and upon the location. Though during the past season the man having 50 colonies in his back yard has realised as much as the average farmer, such years are the exception, and on account of off years, it would be safer to double that number before depending upon them wholly. Again, these figures relate to the comb-honey producers. Run for extracted, something above 100 colonies might possibly be needed.

While there is small question but that a few colonies kept as a side line usually pay well for the small amount of labour their care demands, the profits from such apiaries are extremely small, compared to what the same bees would do in the hands of an expert, and under intensive methods. In a small apiary there is never the chance to put in use many of the economic practices the extensive beekeeper generally finds lying close at hand. Certain it is that the need for specialization has been discovered by a few, and its efficiency demonstrated.

In a recent issue of one of the bee-papers, the editor speaks highly of poultry-keeping being admirably adapted as a side-issue for honey-producers. Unless raising fancy stock, the annual profit from a hen is usually estimated at about 1 dol. For comparison, let us say that the labor required to care for a hen is equal to that for a colony of bees, although, in reality, it is about six times as great. At this rate, in our locality, a colony of bees kept in a log-gum, will return a profit five times that of the hen, or if in a modern hive, with skillful management, the bees will hold their own if a crop is secured once in 20 years.

Few there are who have urged specialization but have pointed out the fact that

a suitable location is absolutely necessary. For this reason, beginners should never start with more than a few colonies, and accurately ascertain the resources of their locality before investing largely. Even with poor management, fair returns may occasionally be had in a first-rate locality, but where there is no pasturage the highest knowledge comes to naught. Seldom does our locality furnish the enormous yields sometimes produced in a few highly favoured spots, but its stability, and an immunity from bee-diseases, make it fairly suitable for specialization. During the number of years in which I have kept bees in this State a total failure of the nectar supply has been unknown.

Not all localities are adapted to exclusive beekeeping, and where this applies, great results should never be anticipated from a small apiary kept as a side-issue; for where good returns can be had, specializations will generally be found desirable.

Complaint is frequently made that through encouraging beginners, danger may be found in some inexperienced person jumping to a hasty and erroneous conclusion that the bee-business is a broad avenue to easy fortune. No advocate of specialty has, however, to my knowledge, even remotely suggested wisdom in such policy. For the experienced beekeeper, properly situated, the advice so often given to eliminate all entangling side-issues, is sound logic.

Without thorough preparation united with some practical experience, the one who invests heavily in bees, expecting to make of them a sole dependence, is foredoomed to almost certain disappointment. Moreover, his experience counts for little if it has been with obsolete methods.

The present-day beekeeper has greater possibilities of living a happy and prosperous life than he ever had before. Still there remains one thing that is absolutely essential to real success, and that is some knowledge of the modern conditions that affect apiculture.



## BEEKEEPING IN JAPAN.

### A DESCRIPTION OF THE BEES, THE CLIMATE, AND OF THE SOURCES OF HONEY.

BY J. HOBBS IN "GLEANINGS."

The oldest record on beekeeping in our history brings us back to the reign of Emperor Kokyokee (600 A.D.), when Prince Yoha, of Corea, came over to our country and let his four hives of bees fly at Mt. Miwa, in the province of Yamato. This is the first historical record we find on bees; but it is not clear whether we had bees before that. Bees in Corea are said to be a little smaller than ours, and those of Manchuria to be a bit larger. Perhaps all kinds of bees in the far East are from the same original race.

From time immemorial people have practised beekeeping in different provinces. The most noted ones are Kii, Shinano, and Kyushu provinces. So the hives kept and honey produced in these regions were considerable. But the way of keeping bees is not improved at all. They use empty boxes or casks to put the swarm in, with no design of conveniencing the bees. In the autumn they open these, cut off the combs, put them into bags, and squeeze out the honey contained. The poor bees brushed off are left with no store for winter. Often they leave some part of the combs for the bees. It is the habit of the Japanese bees not to store pollen for the winter; and as their queens cease to lay late in autumn the honey squeezed out does not contain so much juice of pollen and brood; yet the colour is very dark, with a disagreeable flavour. Some practice what they call a better way—cutting off the combs and setting them out in the sun, which will melt the wax and let the honey run out. Some cut off a part of the comb with honey only, and press them in bags. These are considered fine honeys, and sell high.

We do not use honey as food, except farmers living in mountains too far from any villages to get sugar. Our people consume honey in medical use largely. Most of our people do not know honey as food nor sweets on the every day-table.

Though beekeeping is in such a state, it is quite interesting to know that the beekeepers in the province of Kii have practised migratory beekeeping for ages, keeping extra queens to replace the unprolific ones. Movable frames were known to some of our people more than twenty years ago; but the nature of our bees didn't fit the improved hives, and poor results followed everywhere, and the use of them stopped generally. There are nearly 100,000 hives in our country, with an average of from 10 to 15 pounds of honey.

Mr K. Aoyagi and others saw the defects of the native bees, and the necessity of importing European bees to our country to make beekeeping succeed. But their idea did not work well until Mr. Aoyagi succeeded in importing Cyprian bees. About 40 of them were scattered from his hand in different parts of the empire, besides 35 colonies which he is wintering now. Through his efforts people began to see some profit in the so-called improved beekeeping. Some of our rich men and nobles began to be interested in it. Among them are Count Matzukata's son, Baron Iwasaki, Dr. Nagoyo, and others. In the near future our people will see the value of honey as food and take interest in beekeeping. The Beekeepers' Union, Tokyo, under the supervision of Mr. Aoyagi, has at present about 250 members. The Union is making steady progress, making the highways in beekeeping by publishing a monthly journal, explaining improving beekeeping to the members.

Let me explain something about Japanese bees. They are gentle, but reckless and timid, getting up a stir whenever we handle them. This is one of the principal reasons why they are not fit for the removal of frames; because as the hives



are easily opened, every time they get into a tumult a poor result ensues. They love their queens too much, and like to be gathering too much. This is the reason the use of supers is decidedly impracticable to them. They are very sensitive, too, so they work well as far as the condition of hives is all right; but if they find something in the hive they don't like they cease to work, and run away. They are a hardy race for winter, but fear the heat in summer; they are weak in defending themselves against moth; so if we neglect this in summer, or in case of too much moth trouble, they leave the hives. They never accept foreign queens, and this is the reason of our difficulty in improving bees. The cells are a bit smaller and the walls weaker than those of European bees, so the foundations we get from your country are not liked by them, and sometimes they build drone combs on your worker foundation. The queens are quite prolific, but good swarmers; and when they swarm they gather on trunks of trees 15 to 20 feet feet high, giving us trouble in catching them.

These are the principal defects of our bees, and it is the cause of the unprogressive state of beekeeping here. We find it impossible to get a good result in bringing forth a great income from our native bees—simply too much trouble and too little gain. If I could give fine points on our bees it is their gentleness, as we never use a smoker, veil, or gloves, and their diligence and quickness of flight.

#### THE CLIMATE.

As you know, our country stretches along from southwest to northeast, with the Pacific on the southern side and the Japan sea on the northern. Formosa, the southernmost island, is very hot, while Hokkaido and Sagalien are cold, with deep snow and ice during their long winter. But the mainland, with the two great islands of Kyushu and Shikoku of

our island empire, is in the temperate zone, is moderate in winter, which is comparatively short except in those parts facing the Japan Sea, where snow comes deep in winter. Hakone, where Mr. Aoyagi has his apiary, is the summer and winter resort, both for foreigners and natives. Surrounding mountains and hot springs everywhere in the ranges make the place more charming. The winter we have here is very moderate—with only a little snow occasionally during winter, and the thermometer rarely goes lower than 32 (indoors). The province of Kii, noted for its beekeeping from olden times, is warmer than here. So you can see that we are much favored in our beekeeping so far as the climate is concerned.

#### THE PLANTS AND FLOWERS.

As for the honey-plants, we can not say which is the principal one, like clovers and basswood in America. Each province or region has its own trees and plants cultivated, such as apples, pears, peaches, oranges, persimmons, buckwheat, beans, and others. Moreover, as our lands are so thoroughly cultivated for different plants and vegetables we are not able to plant a honey-field on such a large scale as you do. But besides these cultivated plants we can have a great quantity of wild ones along the mountain ranges which run from one end to the other as if they were a backbone to our long island empire. So when we go to Kii, Shinano, and some part of Kyushu, we find many old-style beekeepers who have colonies by hundreds. Generally speaking, our country is abundant in flowers and fruit trees as well as plants and grasses. From nearly all of them we can have a honey harvest.

The time will soon be here when you will find a bee country in the far East among its beautiful sceneries. We hope, in the near future, to have our people of every class tasting honey at tables. We are praying for the time to come very soon when thousands and tens of thous-



ands may enjoy this high, peaceful, profitable, and interesting business. May these little busy angels reveal the mysteries of His mighty works, and enlighten the spiritual darkness of the heathen nations of the East.

### UNDERSTANDING OUR LOCALITY.

"Mr. Doolittle, not long ago you told how your bees gathered pollen and honey from certain trees and plants, and I came over this morning to ask you how you know that these things give the honey. How can you tell that the bees are not stealing the honey from the hives of other bees or from some grocer's sugar-barrel?"

"Well, Mr. Stevens, allow me to ask you how you know that the English sparrows eat wheat."

"That is easy enough! I have seen them eat wheat with my chickens."

"Yes. And I have seen the bees gathering pollen and nectar from all of the plants and trees about which I have written, and I am just as confident about the matter as you are that the English sparrows eat wheat."

"Do you think it necessary for a man to know about the sources from which his bees obtain their pollen and nectar?"

"I certainly do. One of the most important factors of successful beekeeping is a thorough knowledge of the locality. Many beekeepers do not seem to realise the importance of this, as their actions show; for if they did we should not hear so often of those who delayed making hives and sections till the surplus season was on, or of those who delayed putting on the supers till the best part of the honey season was over, or of those equally unwise who add the surplus room so early in the season that their colonies are greatly injured by the great amount of room when there are but few bees in the hives below."

"Then you think such things should be studied into by the beginner?"

"I think all work with the bees, if successfully done, should be done with an eye open to the probable time of the blossoming of the main nectar-producing plants and trees in the locality. Of course, the pollen part is not so necessary to know about, except when some tree or plant is likely to give an excess of pollen as the hard maple does in this part of York State. Then it is well to open the hives at the close and remove frames solid with pollen to give to colonies deficient in the same when a scarcity comes later."

"But how do you prepare for any known crop of nectar so as to help matters any?"

"All beekeepers worthy of the name know that the queen is the mother bee, and lays all the eggs from which the bees eventually come. After the egg is deposited in the cell, it takes approximately three days for it to incubate, when a larva hatches from the egg. As soon as hatched, this larva is fed by the nurse bees for approximately six days, when it has grown so as nearly to fill the cell. At this time the cell is capped over, and this larva undergoes the changes necessary for it to emerge from the cell a perfect bee, which it does in about twelve days from the time the cell was sealed over, or approximately twenty-one days from the time the queen laid the egg in the cell."

"Yes; but bees are hatching at all times of the year, except winter; so what has that got to do with the matter?"

"Take, for instance, the blossoming of white clover, which we will suppose is our main nectar-producing plant in our locality. To get the bees in good condition for it, we must commence operations with them at least six weeks previous to its blossoming, for it takes at least six weeks to build up a colony so it will be able to do the best work on a given field of blossoms. Hence, as white clover blossoms in this locality about June 16



we must commence to secure our bees for this harvest as early as the first of May."

"But I thought you said that it took only twenty-one days from the time the egg was laid till the perfect bee emerges from the cell."

"So I did. But this perfect bee takes six days to straighten up to where it is ready for a flight from the hive, when a colony is in a normal condition, and ten days more of inside work before it has grown to a full-fledged field worker, while the greatest number of field workers is not obtained for a week to ten days longer."

"But all do not have white clover."

"I know they do not. Suppose the yield came from basswood, which opens from July 10 to 15, there being no more clover than is needed to keep up brood-rearing; then commencing to stimulate the bees for this harvest as early as May 1 would be labour and stores thrown away, as the useless expenditure of honey needed in producing bees to loaf around waiting for the basswood harvest would detract just so much from the success we desire to attain. If we have a field of grain to cut, requiring the labour of twenty men to harvest it, we would not hire these men two or three weeks before the grain is ripe, feeding and paying them during the time; and we should learn to use common sense in regard to the bees the same as we do in other things. When we are told to commence to feed and stimulate the bees as early as possible in the spring, it is well to know what these bees can secure from such stimulation; and if nothing is ready for them to harvest, let us leave the stimulation alone till the resulting bees can work to advantage in the harvest. Again, if we do not get the bees ready for the harvest till after it is over, it would be like hiring the twenty men after the grain had become ripe and had spoiled on the ground. We should have to pay them and feed them when there was nothing for them to do. So the man who

brings the greatest number of bees on the stage of action at any period of honey dearth wastes all the stores necessary for their production, as they become merely consumers instead of producers. They are worse than useless."

"But we must have a lot of bees in the colony at all times of the year, must we not?"

"If by this 'lot' you mean enough to insure the rapid building-up of the colony in time to take advantage of any honey-flow, I would say yes. But if you mean that the colony should be up to the maximum strength at all times without regard to the one, two, or three seasons of surplus from *known* sources, then I say we shall be feeding a promiscuous multitude with no definite end in view. It seems plain to me that, to be the most successful as apiarists, we must have a full force of bees at just the right time to take advantage of the harvest; and in order to do this we must study our locality and know the blooming time of the flowers which give us our surplus."—"Gleanings,"

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### Practical Instructions for Beginners.

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HOW I BECAME A SUCCESSFUL MANAGER  
OF BEES ON A LARGE SCALE.

BY E. D. TOWNSEND IN "GLEANINGS."

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One day in June, 1876, my younger brother and sister coming from school saw a swarm of bees fly overhead. I can remember it as well as though it were yesterday, how I found fault with them for not telling me until after the swarm was out of sight. Probably fifteen or twenty minutes had elapsed after the bees had passed over the road; and since colonies in movable-frame hives were worth 10 dollars in those days, and since I had had the bee fever for some two years, I made up my mind to locate that swarm. I was shown where it



crossed the road and the direction it took. Before I had gone into the woods ten rods I heard the bees entering a tree, and I soon saw them, for many were still on the outside, while others were circling around, making a great noise. They entered a limb well up toward the top of a large elm.

That night I asked a beekeeper when it would be best to transfer the bees from the tree to a frame hive, and he told me that I could do no better than to do it immediately, for the reason that, if the tree was felled before the bees had time to build any comb they could be hived like a natural swarm, without the inconvenience of transferring sticky combs, etc. A third of a century has elapsed since this took place; and if I were asked to-day how to manage in such a case I would give the same answer that this beekeeper gave me. Well, the tree was cut while the bees were flying during the next day; and although their entrance had been 60 feet from the ground not a bee was lost: for as soon as those in the tree started into the new hive, all of the bees heard the "homing hum" and entered the new hive with the rest.

As soon as the tree was down, and before the bees got over being demoralized, the beekeeper who was helping me ran toward the top of the tree; and as soon as he could locate the entrance he smoked the bees so that they could be handled without fear of stings. By sawing in on each side of the entrance, and splitting off a portion of the limb, we opened the cavity where the bees were. The hive was then placed with the entrance as near as possible to the part where most of the bees were, and with a tin dipper the greater part of them were dipped up and emptied at the hive entrance. By the time we had most of the bees dipped out of the tree in front of the new hive there was this loud "homing" call as the bees commenced running in. At this point of the procedure the few bees that were left in the tree were smoked until

they took wing, and then we stepped back so as to be out of the way. All of the flying bees, attracted by the loud hum, soon entered the new hive, which was moved home that night when all flying was over for the day.

It occurs to me to mention here the fact that any beginner noticing a swarm issuing should not rush off to a neighbour for a hive, leaving the swarm clustered, for, as likely as not, the bees will be gone on his return. The better way is to hive them in a soap box or anything else, for that matter, that can be used temporarily, and, when hived, the box should be set on the stand where it is to remain until the new hive can be brought. Then, as soon as the new hive is obtained, he should go to the swarm in the box and blow some smoke in at the entrance in order to avoid stings. (A beginner should wear a veil until he is thoroughly acquainted with the bees, simply so that he will not be nervous.)

As soon as the new hive is ready the box should be removed from the stand and the empty hive set in its place, with a board slanting up from the ground to the entrance. Now the swarm may be hived just as though it still hung on the tree or limb where it clustered at first. By carefully lifting the box off the bottom-board, and carrying it to the new hive, most of the bees can be shaken out on to the alighting-board with a quick jerk, and they will run in just as though they had been shaken from a limb.

To return to my swarm taken out of the tree, I will simply say that it was divided that season, both colonies gathering sufficient honey to winter well. My next step after getting the bees home was to subscribe for "Gleanings." It began coming in July, and has been coming regularly ever since.

#### TOOLS FOR BEEKEEPERS.

An indispensable tool in the apiary is a good smoker. After using all of the different sizes of smokers made, I recommend the larger sizes as being far



superior to the smaller ones. A smoker of the 3½ or 4 inch size is the proper one to buy. They cost a trifle more than the smaller ones, but this extra cost is offset many times, for they burn longer and give off a more dense smoke; in fact, there is no argument that can be advanced in favour of the small smoker. A common mistake that most beginners make is to buy small or cheap tools and hives. I believe that the main reason why the eight-frame hive is more universally used than the ten-frame is because the first cost is less, and those who start with the eight-frame hesitate to make the change.

#### HOW MANY COLONIES TO START WITH.

The first things to decide upon are the number of colonies to buy, the size of hives, and the season of the year when the start should be made. When I began beekeeping, many of the colonies around me were in hives of a size and style not to my liking; in fact, there was no standard frame in use then as there is now, and the beginner simply followed some one of the leading honey-producers, adopting his hive and frame. All these things are now changed, and the beginner will have no trouble in finding bees in hives containing regular Langstroth frames. This frame has more points in its favour than any other at the present time, and I would advise the beginner to adopt it.

There is a great diversity of opinion as to the proper number of frames to use in a hive. The majority use eight frames; but quite a number use ten frames to the hive, and a few think that twelve frames are none too many for the best results. It is not the intention of this article to go into the discussion of the hive question; but if the beginner will take my advice he will adopt the ten-frame hive for the production of comb honey, but especially for extracted honey.

After deciding on the size of hive it is important to get the right number of colonies to start with. Beginners should

understand from the first that there is much to learn, and that the first few years will be largely experimental, so that not much honey will be made at first. The experience can be acquired about as well with a few colonies as with a large number, and the expense is much less. When starting on a small scale, the increase of bees and experience go together.

It is noticeable that those who have gone into the bee business on a large scale from the very first, without making an effort to get the necessary experience, have usually turned their attention to something else in a few years, usually going back to what they did before. This is the natural thing; for since they knew nothing about the producing of a paying crop of honey the venture proves a failure.

I would recommend at the start from two to four colonies, whether the beginner has much capital or not. I do not think that one without experience can go into this business and depend upon hired experienced help to do the work, for he must know the details himself before he can manage others in such a way as to make a financial success of his plans.

#### HOW TO BUY BEES.

In looking for colonies to buy it is well to select them from yards in the vicinity of the place where we expect to establish an apiary, if such can be found, for in this way no more bees are brought into the locality. This is a strictly business proposition, and the amount that one can afford to pay extra for colonies that are ready within perhaps a mile of the proposed apiary is a little hard to tell. The number of colonies a location will support, and the number already there, are determining factors. If the beginner has any doubts as to whether the location will warrant its bringing in new colonies, he should buy them near home, even if the price is twice what it would be at a more distant point.



During my early experience in bee-keeping there were a good many small apiaries around me, isolated from other yards, so that the bees had unlimited pasturage; and these few colonies in a place always gathered more surplus honey than those in the main yards where perhaps a hundred colonies were kept. The fewer bees in a given location, the larger the crop of honey, other things being equal.

#### WHEN TO START.

An experienced beekeeper need not hesitate to buy bees any season of the year. Some of the best bargains are found in the fall, for it is then much easier to buy bees. However, for one without experience, spring is the best time to purchase bees, for he will be sure of having them through one surplus season at least before he has the wintering problem to contend with, and this much experience will help him in the solving of the wintering problem.

#### NOT NECESSARY TO BUY OLD HIVES.

When buying bees, see that the combs are in good modern frames of Langstroth size. The hive is of secondary importance; for if the combs are of the worker size, and straight and true, they can be transferred to frames in new hives. This is the way most of our buying is done; for after the bees are transferred the old hives are returned, for we do not want them. If the beginner were to buy three or four old hives, and use them in connection with new ones, they would never be satisfactory. It usually happens that bees can be bought enough cheaper without the hives to make it more economical all around to buy new hives outright.

Try the "Australian Bee Bulletin" Printing Works for your Honey Labels and your honey will sell 20 per cent. better.

### VICTORIAN APIARISTS' ASSOCIATION.

Business Paper of the Annual Conference to be held at the Federal Coffee Palace, Melbourne, on the 22nd and 23rd of June, 1909.

9.30 a.m. Tuesday, June 22nd.

President's address.

Minutes of the last Conference.

Secretary's Report.

Grasshopper, fungus and bees. Mr. E. Garrett.

Substitute for pollen. Mr. D. M. Morgan.

2 p.m.

Bee diseases. Mr. T. Bolton.

Legislation on same and arrange for a deputation to the Minister of Agriculture (Dr. Cherry and Mr. E. G. Duffus, Director and Secretary respectively of Agriculture will be present during the address, and discussion on the last two items).

Spring losses of Bees. Mr. R. Beuhne.

Bee Range Licenses. Mr. T. Bolton.

Treatment of honey from the hive to the consumer. Mr. R. Beuhne.

On Tuesday a visit of inspection will be made to the Government Technical Museum, and honey will be sampled by delegates.

9.30 a.m. Wednesday, June 23rd.

Amendment of Rules.

11 a.m.

Marketing of honey. Mr. J. Burrow, of Messrs. Burrow Bros., Melbourne.

2 p.m.

Export Trade. Mr. J. Knight, Chief Inspector of Exports.

3 p.m.

Eucalypts of Victoria. Mr. A. D. Hardy, Forests Department

Uniform weight of honey in tins.

Race of bees best suitable to Victoria. Mr. Rayment.

Suggestions and questions.

Election of Officers and Committee.

General business.

Delegates are requested to bring to the Conference specimens of leaves, young and old, buds and fruits of eucalypts in order to have them identified by Mr. A. D. Hardy.

Holiday excursion tickets will be available on the Victorian Railways from June 19th to 25th inclusive, and delegates may obtain the same concession for their wives provided they accompany them. Requisition for tickets are issued by the Secretary of the Association, and must be applied for not later than June 15th.

W. M. WIGNALL,

Secretary,

The Rialto, Collins St.,  
Melbourne.



**HIVE CONSTRUCTION.**

BY JOHN SILVER IN "IRISH BEE JOURNAL."

This subject is very much in the air of apis mellifica land at the present time. It was discussed at the February meeting of our Croyden Association, revealing the great difference of opinion which exists among beekeepers. Practically, the only thing they agree upon in the matter of hives is that bees must be kept dry. Mr. Coggeshall, the owner of some 3,000 colonies in New York State, places the hive fourth in the order of importance. He considers locality to be the first consideration, the man second, the bees third, and the hive fourth. I am inclined to agree with him, except that I should place the strain of bees in the second place. I had a three hours' chat this week with a veteran apiarist, owning from 400 to 600 colonies, and with nearly fifty year's experience, who makes all his own hives and frames. This old-fashioned veteran declares that there is nothing to beat a combined wood and straw hive for health to the bees, but the straw should be vertical, and not horizontal, and it requires a network of wire outside to prevent rats and mice entering. He also declares that 1½ lbs. of bees, with plenty of natural stores, will winter better, and come out stronger the following April in a straw hive, than three times that number of bees wintered in a wooden hive. I asked him for his reasons, and he said that the straw absorbed the dampness given off by the bees during the winter, while in the wooden hive this superfluous damp is apt to be retained and thus becomes fatal to the health and vigour of the bees. This veteran produces sections by the thousand, and his views are worth consideration.

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