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The Australian bee bulletin. Vol. 10, no. 6 September 28, 1901

West Maitland, N.S.W.: E. Tipper, September 28, 1901

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✠ THE AUSTRALIAN ✠ Bee Bulletin.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.
EDITED AND PUBLISHED BY E. TIPPER, WILLOW TREE, N.S.W.
Circulated in all the Australian Colonies, New Zealand, & Cape of Good Hope.

VOL. 10. No 6. SEPTEMBER 28, 1901. PER COPY, 6D.
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ABUNDANCE OF ALL KINDS OF GOODS

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The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

Edited and Published by E. TIPPER, West Maitland; Apiary, Willow Tree, N.S.W.

MAITLAND, N.S.W.—SEPTEMBER 28 1901.

The following is a list of advertisers in our present issue:—

Supply Dealers.

R. K. Allport, Chuter St., North Sydney.
A. H. Hordern & Sons, Haymarket, Sydney.
The W. T. Falconer Manufacturing Co.,
Jamestown, N.Y., U.S.A.
Chown Bros. and Mulholland, Ltd.,
Thomas St., Ultimo, Sydney.

Queen Raisers.

W. Abram, Beecroft.
H. L. Jones, Goodna, Queensland.
A. A. Roberts, Muswellbrook, N.S.W.
Jas. McFarlane, Lyndhurst, Victoria
Mrs. Jennie Atchley, Beeville Bee Co.,
Texas, U.S.A.
J. W. Miner, Ronda, N.C., U.S.A.
R. H. Jervis, Moss Vale, N.S.W.

Miscellaneous.

A. Hordern & Sons, Haymarket only,
Sydney.
Allen & Co, 242 Sussex street, Sydney
The Farmers' Co-operative Company,
Ltd., Sussex street, Sydney.

HOSE of our readers who have carefully read letters of Mr. Bolton, Mr. Meiklejohn, and of the Drone, in this issue, must come to the conclusion there is a market for Australian honey in Great Britain. The question is, how to tap that market effectually. We have on a previous occasion stated there are hundreds of towns with prosperous populations wherein much honey is not sold. London and Birmingham are not the only places honey can be sent to. They may be great distributing centres, but those who do the distributing want their profits, and big ones too.

Are there not all over the colonies beekeepers acquainted with one or more provincial towns, and reliable men in such, that they could open communication with; perhaps also relatives and friends who would act as go between?

Again, here is another matter in favour of local co-operation. A beekeeper may have perhaps ten or twelve tins. The cost of shipping that quantity to England or elsewhere is far greater than when sent in larger quantities. To give an example. A full ton of honey from our apiary to Sydney costs £1 14s 6d. If we send half-a-ton, or smaller quantity, it goes at the rate of £3 12s a ton. That is, the half-ton would cost as much as the full ton. Now, if the beekeepers in Mr. Bolton's neighbourhood (the Richmond River), were to club their honey with him, and send it all together, how much would they save in the freight alone, as well as help to keep the market secured by him by keeping up the supply?

If beekeepers in different localities would thus co-operate, first securing some home provincial market, then sending the honey all together, we feel assured, a great deal of colonial honey would be disposed of. And there is, to our thinking, a good solution of the local association question.

Since writing the above we have received the following communications from Mr. McFadyen, Manager of the Farmers' Co-operative Co., Ltd., Sydney:

LONDON HONEY MARKET.

Sydney, Sept. 17th 1901

We have further advice from our London Agents that the English market is much overstocked, and prime honey is selling as low as 17/- cwt. From this, we fear that final returns

for the parcels exported, will not be as satisfactory as expected.

D. McFADYEN,
MANAGER.

Sydney, 26th Sept., 1901.

Under date of August 23rd, our London Agents write:—"Californian and Jamaica honey are selling at 15s per cwt., and both these classes are superior to Australian." Our people point out that it will be only out of the very best coloured stuff that they will be able to get anything like the price named, and needless to say we much regret this unfortunate state of affairs.

D. McFADYEN,
Manager.

In the Northern hemisphere the summer months are June, July and August. Then the honey flow is on, and from all parts of Europe and America, as well as England itself, would possibly be poured into the great London market, hence the glut as reported. It would be well for Australian beekeepers to remember this when sending honey to England. Australian honey should reach England in time for the winter and spring months there, say December to April.

A beautiful rain—we had some four inches—followed by several weeks of very hot weather, all sorts of prophecies and questions are being asked as to the ensuing season. Trees are beautifully in bud. They were so two years ago, and we looked forward longingly for them to burst. But in a few weeks continued hot weather had parched the buds off on to the ground below, which was carpeted with them, and there was no honey whatever. So the question is, what is it to be this year? There is plenty of moisture at the root of the trees, the grass looks lovely. So we are hopeful, and should we have some occasional showers there will be a fine honey flow. It is well therefore to be prepared. Have supers ready to put on; have your tins or sections ordered, get your labels printed. And here we ask our readers to look over our list of advertisers on page 121 whether it be supply dealers, for hives, fittings, etc., or queen raisers for fresh

blood. By keeping record of honey, or frames of honey, or number of sections taken from each hive, making all due allowances for spring starting—you soon find your best and worst queens. May all our subscribers best anticipations be realised.

THE ENGLISH MARKET.

PAUL MOOREFIELD.

I wrote to you some time ago about my sending home a case of honey to Lancaster, near Liverpool, to a friend of mine. I received a letter from him to-day, and as it might be of some interest to you I am sending you some extracts from it:—

"I did hope to have been able to give a good account of my dealings with the honey, but I cannot, this time at any rate. In the first place I will not be able to make anything out of it in the wholesale way, as the people I was in negotiations with can get it far cheaper than I could sell it at, and I know it is true from the price quoted in the *Grocers' Gazette*, Australian honey 32s per cwt., so I think I will be my own middleman and retail it myself, as I think it is off as far as the wholesale trade goes. I will get a half gross of jars and put it up myself, of course you know the price which you think it sells at here is a fancy one, and it is only sold as a medicine in a chemists shop, and for that matter they are only nominal pounds at that. It can be got for as low as 9d retail, but it cannot be the genuine article, but still that argument is used all the same when I go round to people who are likely to want it in large quantities. One party had the impudence to offer me 3½d and take the lot, saying that was a farthing more than he usually gave for the best English, (but he lied as it cannot be got for less than 5½d guaranteed). I suppose he thought he was doing me a favour. I told him it was "worth that much for our own consumption." I told him he could have it at 5½d, but I could not do any business, so I have made up my mind to retail it myself, and I think I will be able to make it go if you could let me have it at, say 4d in ton lots c/p. You will see what price English honey sells at, and there is something in a name after all. All appear to be of one mind as to the quality, which is very good, and, of course, it is his business to depreciate it, and get it for as little as he can. Write and tell me what the bees feed upon, as I am often asked the question. This honey has not reached the granulated stage yet. Is

it on account of the heat. The other tin you sent was quite hard, and I find the people would rather have it that way. I have found out since that it is not as scarce as I thought, though it is not used to the extent as it is with you, and it would take a lot of money to get people over here to adopt it as a common article of diet."

You will see, Mr. Tipper, that this does not offer much chance in the wholesale way in England, and that the only way is as my friend says, retail. I will let you know when I hear the results of this attempt at retail selling. The honey was box and red gum, same as sample I once sent you.

Sparrows are very destructive on bees. Kill weeds at entrance by sprinkling salt.

An extraordinary good honey year is anticipated in California.

The past honey season in England has been very good.

A mixture of honey and glycerine is good for chapped hands.

It is astonishing how much people know about bees who have never kept them.

£7,205 worth of honey was imported into the United Kingdom in the month of May last.

McEvoy says fine grass hay will subdue cross bees when shavings or bark will not.

Several excellent articles by good writers, and correspondence unavoidably held over till our next issue.

Always keep a record of the returns of each colony. Our plan is to make a record at side of hive of every frame of honey taken out.

Smooth and straight flat-pressed bricks, 16 inches wide by 21 inches long, laid on the ground, make a good stand for hives, if you can get a local brick maker to make such.

Honey from dark combs is not so light as from new white combs. Dark combs may be cleaned by soaking them in water and throwing the water out by means of an extractor.

It will be seen by correspondence elsewhere that N.S.W. beekeepers can obtain special leases in forest reserves. The best thanks of the fraternity are due to R. A. Price, Esq., M.L.A., for bringing this point out.

An old N.S.W. beekeeper informs us he has taken swarms from bush trees where the combs have run over six feet in the hollow, the first being old, and the bees evidently leaving them to build new as they became unworkable.

In localities where there is one short, early honey flow, if good queens of the current season's rearing are introduced before the flow commences, few swarms will issue. But if there is a dearth of honey after the early flow, and then a good crop comes from fall bloom, in my experience many swarms will issue, even with young laying queens.—*Exchange*.

Honey to be bottled should be heated up to 180 degrees. A large coffee pot is an excellent vessel to pour it into bottles with. A solid rubber mallet drives the cork in without destroying the vessel. Melted resin and beeswax, into which the top of the filled bottle is dipped gives a capital finish and an air-tight one too. Bottled under these conditions very little will candy for a very long time.

I want longevity in my bees; I want that first and foremost; that is why I don't want to replace my queens every year, because if I do, I must kill them; and I don't know what to kill. If I keep them three or four years, and they have done good work for four years, wintered well and given me comb-honey in good-shape, that is the kind of queen I want to rear others from.—*American Beekeeper*.

In England a "beekeeper" boasts how he subdued vicious bees. He went to work after dark, and the bees attacked him savagely—we don't wonder at that. Armed with a flat stick and a pan of burning sulphur several hundreds soon lay dead on the field of battle. He says the bees were amenable to reason after that. Would they not have been by judicious smoke and care in opening at reasonable times?

I am not much of a believer in "farm bee-keeping." Every man to his trade. "Every farmer should keep bees" is an old saw that needs considerable filing. Or, better still, throw it away entirely. There is nothing in it. Of two men who would start in, one to keep bees and one to keep sheep, here in Wisconsin, the one who followed sheep farming would stand the best chance to make money, provided that he understood his business as well as the beekeeper did beekeeping. Then why advise him to keep bees and complicate his work? I will keep bees in preference to other branches of production, because I understand it and do not understand the others.—H. LATHROP, in *American Beekeepers' Review*.

WORK FOR THE MONTH.

Four inches of rain in August has given great promise for the coming honey flow. Yellow box in bud. This is the third year without any honey from white box. We can look around on all the hills covered with timber, and a stranger might be apt to say, what a splendid bee country! But three-fourths of it has had no bloom on it for these three years. The bees are now working well, bringing in a lot of pollen. Remove all drone-comb from the brood chamber. You may put one or two frames next the sides, where it will most likely be filled with pollen. Drone combs may be placed in the supers, where they can be filled with honey.

Should you be going in for sections a good way is to wait till they are storing honey in the super. Then remove same, and substitute super containing sections with starters or foundation, shaking all the bees in the extracting super into the one with sections. Those bees, having got into the way of going into the super will more readily go into the sections. Another way of driving them to work in the sections is to contract the brood chamber by a division board, and placing a frame full of honey in the centre of the brood nest. The bees will remove the honey in this frame into the super in

order to keep the brood intact and give the queen room to lay in it, and so start the sections. During the winter we placed all blankets between the lower story and super. We have now shifted them above the supers.

We would call particular attention to an advertisement elsewhere of cold water paint, as supplied by Mr. L. T. Chambers, of the Beekeeper's Supply Co., Melbourne. It ought to be a great boon to every beekeeper.

We shall be very pleased to supply any information required by beekeepers in the management of their apiaries.

FOREIGN MARKET.

Mr. Frank Bolton, under date August 30, sends us shipping company's account from which we take the following:—

First consignment to London, principally tree honey and candied:

EXPENSES FOR SEVEN CASES OF HONEY, SYDNEY END.

To Sydney	...	£0 7 0
Cartage	0 2 0
Stamp Duty	0 0 6
Entry through Customs	0 2 6
Freight to London	1 1 0
		£1 13 0

LONDON END.

Clearance and cartage 15 miles	£0 15 0
Total Charges	2 8 0
Returns 7 cases at £2 per case	14 0 0
Expenses	2 8 0
	£11 12 0

Mr. Bolton also says:—I have an agent leaving Sydney next week for Port Elizabeth, South Africa. He is in the wholesale grocery line, and is going back to make a fresh start, and he is sure he can do a good trade with me. I am sending samples by him, and have taken upon myself to guarantee a regular supply, which I am sure you will back me up in. His stores are in Bloemfontein, but the Boers cleaned him out of everything, but he is going back next week. He has been staying here with me.

Working Layers and Unfertilised Queens.

Working layers are in queenless hives. That is, if a hive has been for a time without a queen till all the eggs have turned into larvae, and all larvae into bees without being able to start a queen, in their intense desire to get one and perpetuate the swarm, some of the working bees, who are all really undeveloped females, will develop themselves so as to lay eggs. But those eggs are unfertilised. And so they, as is the case of an unfertilised queen, will all turn out drones. But smaller than the regular drones. And whether they can become the fathers of future hives of bees is a question still undecided, although the question has been asked year after year, and time after time. So no worker bees are raised. The old ones gradually die off, and it is only a question of a few weeks and the whole swarm disappears.

The same thing happens with an unfertilised queen. For some reason or other, when a virgin queen, she has failed to meet a drone. Queens raised in the fall, or too early in the season, when drones are scarce, are very likely to be unfertilised. Hens without a rooster in the yard lays eggs, but they will not bring out chickens: so queens not meeting a drone at the proper age, lay eggs which produce only drones. Again the same query is still unsettled whether the drones are as virile as drones from a properly fertilised queen. The swarm dies out in this case just the same as with working layers.

The cure in the case of working layers.—Remove the hives some 50 or 60 yards away. On its stand place a fresh hive in which place a frame with a little brood and eggs, also a queen in cell. Then take each frame of the hives with workers, shake all bees off on the ground in the new position, and place such frame in the new hive, putting worker comb next the frame with brood, and any with drone comb next hive side. The bees dumped off will fly to the new hive. The worker

layers will stick about the ground with a few bees around them, possibly too heavy to fly the distance, although not distinguishable from other bees. This plan of getting rid of laying workers we have never known to fail. With drone-laying queens, kill them, and introduce a laying queen. There are many ways of introducing, one of the latest being by tobacco smoke. Different beekeepers have their particular methods. The plan we have adopted and stuck to, because we have always succeeded that way, is to fix the cage or cell containing the queen in or on the combs in a place where she can get the full scent of the hives. Leave it there for 48 hours. Then turn up wire cloth so the outside bees can have access to the food in cage and eat through to the queen. One way we have succeeded in, is to shake all bees off and place a fresh hive on stand, placing in it only the brood frames, and filling up with other combs and starters. The strange scent of the new hive seemingly confuses the bees, and they readily accept the queen.

Drone-layers are known by the eggs being laid unevenly, several in one shell, and when capped over are dome-shaped as drone-cells are, but smaller, being laid in worker cells as well as drone cells.

BEEES DYING IN THE HIVES— ONE OF THE CAUSES.

C. P. DADANT, IN *A. B. Journal*.

I see an inquiry on page 201, concerning the cause of death of a lot of bees. This case seems to me identical to the bee losses in this vicinity during the winter of 1879-80, and I will ask leave to describe it.

The season of 1879 was very dry. During the summer and fall the bees harvested nothing. But fruits were plentiful and so were birds, and the bees worked during the fruit season on all sorts of damaged fruit. They began on damaged peaches, in August, then took to grapes, and later to apples. The number of bees found in small vineyards

was so great that vintners held meetings in which they discussed the advisability of petitioning the legislature to obtain a law forbidding the keeping of more than 20 colonies of bees in one apiary. Wherever a damaged berry was found it was full of bees and most of the grape-growers were of the opinion that it was the bees that punctured the fruit. Arguments were out of question until the heads became cooler, and it was at that time that we decided to plant grapes on a large scale in order to show our neighbours that grapes and bees could be kept profitably on the same farm, in large numbers and without mutual injury. The damage in this case was really greater on the bees than on the fruit, which had of itself no value for any one, and the bees themselves would have been better off without it. This unwholesome sweet (?) fermented in the hive and became inferior wine, cider, vinegar—yes, mainly vinegar. But there was nothing else for them except an occasional sorghum mill, and sorghum molasses is a poor addition to cider from rotten apples.

We removed all that we could find of this unhealthy food, and fed our bees on the best of sugar syrup. But in spite of it all, we had heavy losses, especially because the bees were confined to the hives for a number of weeks together during the coldest weather. But some people were worse off than we. We bought up an apiary, of some 80 colonies, the following spring. This apiary had been almost entirely destroyed by this bad food during that winter.

Those bees had not been fed, but there seemed to have been enough of this stuff in the cells to keep them till the coldest weather, and there was some of it yet to be found in many of the hives. The bees had slowly dwindled down and had changed position in the hives as the combs had become soiled until the last small cluster had perished in an upper corner, driven there by the cold and the stench arising from the foul dead bees. It seems as if a little of this sour food went a great way toward sickening them, for

colonies which we had plentifully supplied with healthy food nevertheless showed signs of diarrhea, indicating that they, too, had consumed the nasty stuff.

Strange to say, after the opening of spring, it seemed as if the consumption of this food for breeding was not attended with unpleasant results. Strong colonies that managed to pass through this disastrous winter, prospered and thrived when warm days came, on the plunder that they obtained from deserted hives, for the stuff seemed to be scattered in small patches in many of the combs, the most of it being unsealed, as might be expected.

The most damaging result of this bad food is certainly brought about by the long confinement of the bees during cold weather. In an open winter, when the bees can have a flight once a week, I believe much less trouble would ensue, but when the bees are long confined on the combs, with such watery unhealthy food, they become unable to retain their excrements and the healthy bees catch the infection from the diseased ones. The after result of this trouble in spring is, sometimes, constipation or an inability on the part of the bees to discharge their excrements. This constipation becomes contagious, and in the latter form has been described by Cheshire under the name of "*Bacillus Gaytoni*." The bees that suffer from it are heavy, they drag themselves about as if partly paralyzed, they shine as if varnished; this comes, I believe, from their having lost all their coat of hairs. Even the queens catch the disease, sometimes, and in such a case the colony is not slow to perish, even if the weather has become warm. But in most instances the disease slowly disappears or wears out. I have, however, seen it persist through the summer in a few hives and the diseased bees kept themselves almost invariably at the top of the brood combs, until they were carried out by their merciless sisters, for the bee is pitiless to the useless member of the family, and sickness finds no sympathy with her.

✻ CORRESPONDENCE. ✻

J. B., Palmer's Island, Sep. 14:—I am bothered with a small black ant getting into my honey house, although I have it up about a foot high on blocks. What is the best way to get rid of them? I have tried different ways to hunt them but they are hard to beat off.

[Get some ant destroyer from Mr. C. U. T. Burke, Loyalstone.]

J. A., Hexham, September 15:—We are having very dry weather now, we are busy extracting the honey we left with the bees in the fall of the year; it is very dark. They are in splendid order. I hope your bees will do better this year than they did last year. Are you going to do anything in rising the price of honey this season?

F. W. Penberthy writes:—I have often heard people say they can't get good honey in Sydney. Most people leaving this district to settle in Sydney continue to get their honey from this district. A party called for honey a few weeks ago to send to his friends in Sydney. He remarked that it was strange they could not get good honey unless they paid high prices for Californian honey. Most of the honey that goes into Sydney from the western slope is the same as mine, which I think is half the Sydney supply. The Californian honey crop has been a dead failure for two years before this present crop just taken off. Where do the Sydney grocers get their Californian?

B. H. F., Port Adelaide, S.A., Sep. 17:—There is really nothing worth reporting to write about. My bees started the season in first-rate condition. I have the supers on and honey is now coming in freely. I am thankful to say I do not depend upon the honey for a living. The wholesale price in Adelaide last season ranged from 1½d to 2d, and one of our merchants was offered several tons at 1½d per lb. by a Sydney firm. I should like to hear an expression of opinion by

some of your leading men on the methods given in your May number by which foul brood could be developed. I have both seen, and must admit, practised, some very primitive dividing, yet never knew an instance of foul brood resulting from it. Have any of your readers had any experience with laying workers, if so I should like to hear of it. (See article on page 125.)

T. L. I., Borambil, September 2:—I have had very bad luck with beekeeping, in fact I have not got the time to attend to them, which must be the cause of my non-success. Please continue the A.B.B. for it is a first-class little paper, and I think it will learn me a lot more about bees. Hoping you and your bees will have a real good season.

S. M. D., Wodonga, Vic., 31st August:—I am glad to say I receive the A.B.B. regularly. It contains some very good information in its valuable columns. The last season here was fairly good. I have sold all my honey at 3d and 4d per lb. Bees went into wintering very strong, with plenty of honey, and not having a very severe winter they are all looking pretty well now. Some of my hives have too much honey, I have to take a frame or two away from some and replace with empty ones, to give the queens laying room. I have not seen any foul brood this year, and do not want to. I have two or three hives very bad with paralysis, but will requeen them as soon as I can. The box trees are coming into bloom, and with the splendid rainfall last week there is every prospect of a good season ahead. Wishing yourself and A.B.B. every success.

J. B. H., Narrowmine, August 25:—In reply re my bees, it was the beginning of last summer that I had the loss in bees. They had a good surplus of honey, and were in new eight frame hives that I got from Sydney. Thousands of them lay dead in front of hive and in the box as well, and people noticed them about in the field very weak. Would it be spring dwindling or dysentery. I saw where a beekeeper thought he had found

a remedy, and lost 14 swarms. I have six left and it has taken them all their time to live this last winter through, but there are good hopes of a good honey season this summer. I have about 20 boxes to fill, and will have to fill them with swarms if I can get them cheap. There are none in Dubbo district. I intended going in for a big lot, but that disease has frightened me to go in expensively. A bee farmer at Moss Vale recommended your paper. I got several queens from him, one of his queens pulled through and the bees from her are very true. My reason for writing again was to explain that the bees were well cared for. Would you advise me to clean the hives with such as Condy's fluid, to kill any germs that may be left in hive, before putting any more swarms in them.

[Your bees have evidently suffered either from spring dwindling or paralysis. Spring dwindling means the dying off of old bees that have lived through the winter, perhaps unsuitable food in the early spring. Cattle and sheep often get scours in the spring from young soft grass, and why should bees not also be similarly affected? If the weather is suitable and plenty of food the queen will breed up soon to remedy this. If paralysis the only likely remedy is to change the queen at once. A lot of remedies have been suggested, both here and in other countries, for the last ten years, but none to be relied upon. One was to sprinkle the frames with sulphur. Don't sprinkle it *in* the cells—on top of frames or in entrance. It may do no harm to clean the empty hives with Condy's fluid, or you may pile them on top of one another, and put a pan with burning sulphur on the ground. Paralysis is generally the result of two close breeding for the sake of colour, and more often in light coloured bees than others.]

J. C. Hurstville, September 4:—Good season last year and every promise of same this season. Bees very strong, denoting early swarming. Have not had return of foul brood since I wrote informing you I had cremated them, which at the time drew forth much sarcasm from some of the experts who are subscribers to your valuable journal.

S. H., Telangatuk East, Vic., September 2:—We have had a mild winter here, and the bees are buzzing about on fine days. I believe there will be some early swarms, but it may be worse for us later

on if the stores get all consumed and the hives full of bees before there is any flow. We will know what robbing is. I have seen it this way before to my great annoyance, but I hope for the best. The honey market is very good over here for this time of the year and after a fair season.

H. L. Jones, Goodna, Q., Aug. 27, 1901—Bees are doing splendidly here just now, everything points to a fine season. Trusting that your prospects are equally as bright, and awaiting your further esteemed favours.

E. J., Taradale, Vic., August 28th, 1901.—We had a very fair season here last year, but this coming season will be poor unless I do a move. The winter has been severe on the bees and has been the cause of a little loss. I intend taking a tour round next week in search of good bee country for the coming season. With good wishes to all beekeepers.

H. E., Liverpool, 4th September:—Herewith please find cheque £1 0s 6d, being 15s due, and 5s in advance for coming year subscription for your valuable little paper the "A. B. B." from which I always gather some useful information, and cannot help noticing its improvement. I run 160 hives here, giving a fair average crop and have a good private demand for same. I spare no labour or expense in trying to bring my apiary to a successful issue. This locality is principally iron bark and box with other intermediate forage.

F. B., a South African beekeeper writes:—I am afraid the wretched war will drag on for some months yet, and when it is over it will take months, may be years, before the country gets into good working order again, for now it is simply ruined. We have been having fine weather considering the time of year, but expect soon we will be having the usual horrid winds. Its only to be hoped that they will blow some good to some of us. I hope you will be amongst the fortunate one.

See that your neighbouring beekeeper gets the *A. Bee Bulletin*.

QUEEN REARING.

J. M. DAVIS IN *Progressive Beekeeping*.

"Wat's them little yaller things you're gittin', Kunnel?"

"Queen-cells, Tom."

"They are mity purty, Kunnel. Does the queen stick them on the little stick that way?"

"No, Tom, the queens do nothing except deposit eggs. My little daughter Annie Dane, makes these for me, it is just fun for her, and saves me a great deal of time, as I use hundreds of them."

"Well, I declar, thet child is only eight years old, and makes such nice little things? Looks to me like it would take a regler jueler to do sich work, how on airth does she make them so thin and smooth at the mouth and so round and nice?"

"Wat's thet quill spoon for, Kunnel?"

"This is to transfer the larvæ from the worker-cells to the queen cells. I will show you the modus operandi. Here are eighteen cells in this hive nearly ready to cap over. See, twelve are large and rough, four are smaller and rather smoother. I always destroy such cells, so I will take these four, and use their royal jelly to put in these new cell—hand me the stick, Jake."

"Why, Kunnel, here's a worm in this one, is it a moth?"

"No, Tom, it is a young queen, see I can throw them out this way, and dip up a small quantity of the royal jelly with my quill spoon, and place it in the bottom of the new queen-cells, thus; now, I have fixed thirty-two cells. I will get the larvæ from the "Berberini" imported queen. See, I remove this dummy first, and find the queen."

"There she is, Kunnel, on thet frame."

"Thanks, Tom, your eyes are keen. You see I cannot afford to risk dropping so fine a queen in the grass or to injure her, therefore I never take any chances. I will just take this frame and leave her in the hive. See, here is plenty larvæ just the right size, about twelve to

twenty-four hours old. I slip my quill spoon under them this way, raise them out and slowly lower them into my queen-cells, until the point of the quill just touches the royal jelly at the bottom, and by drawing it back, the little larvæ sticks to the royal jelly, which is in its nature glutinous. Now all the cells on this stick have larvæ in them. I will place it between these two combs of brood in super of number 50. See the stick fits tightly in this frame half filled with comb, and the brood on both sides will help keep the little queens warm, as the bees cover these combs all the time."

"Why, Kunnel, won't the little queens fall out, with the mouths of the cells down thet way? And how on airth do you take little worker-bees and make queens outen them?"

"No, Tom, they won't fall out, the jelly holds them, and its their nature to grow with their heads down. Never horizontally, like a worker-bee. The peculiar food given them in great abundance, and developing in large perpendicular cells, transforms them into queens.

Now, that I have my one hundred queen-cells stocked with larvæ, I will take out some ripe cells."

"Wat do you mean by ripe cells, Kunnel?"

"A ripe queen-cell is as easily distinguished as a ripe apple. See this stick of queen-cells. The points are all light-coloured and pointed, these will not be ripe for several days. Now here is a stick of cells that will hatch to-morrow. See they have blunt flat ends that are brown, and rough. The bees knowing that the young queens will want to come out to-morrow, are helping them by trimming off the points of the cells. I take them off the day before they are due, and carefully place them in the half-inch holes you see in this block, with the points resting on the little wool cushions so as not to jar, or injure the young queen. I have only twelve ripe cells this time. Tom, here is what we call a queen-nursery, which is merely a very small swarm of

bees—enough to cover well, two or three Langstroth combs.

See this patch of brood? I place the cells thus, just above the brood and press it into the comb. See, no danger in pressing a Doolittle cell into a comb that way, but a very light pressure would destroy a natural cell. This nursery has been queenless two days, and will gladly accept the cell. Now here is a nursery containing a queen that I wish to mail to-night. Here see is; see I remove the cork in the end of this cage, and pick her up by both wings, poke her head in the hole from which I took the cork, thus. See, she went in nicely, and to keep her there, I place the end of my thumb over the hole until I can put in ten or a dozen works, not too young. Now all are in, I replace the cork, tack on the cover, thus. Now I will put on a one-cent stamp and send them to the post-office. I will have to protect the cell, or the bees will destroy it before they miss their queen. This wire-cell protector prevents this, and by the time the young queen emerges from the cell, they will have discovered the loss and will gladly receive her. In two days she will be laying and I will ship her, give them another cell, and continue to do this until the season is over."

"Well, Jake, here is the new hive with foundation, all ready to hive your swarm on. You shall have a nice queen, a descendant of the Berberini stock, as soon as your colony is ready for her, and I predict that a progressive young beekeeper will make his start with this colony."

PUBLICATIONS RECEIVED.

The *Grip*, published at Grafton, E. J. Brady, being the conductor, a well-known Sydney writer. The *Grip's* policy in the main is the advancement of all North Coast interests, the improvement of the conditions of the people of the North, closer settlement, equitable land laws, and the encouragement of agriculture, dairying, pastoral and general commercial industries. It is very bright and newsy.

UNITING.

W. H. STEPHENSON IN *American Beekeeper*.

First decide which of the queens is most desirable, removing the condemned one. In making this decision the past record of the queen should be consulted. It would be poor policy to condemn a queen that has a good record, simply because she does not happen to have her colony as populous as another at this season; her past record should decide her destiny. Having made one of the colonies queenless, sprinkle both colonies with a strong solution of peppermint and water. Take all of the brood from the queenless bees and give it to the other hive. Cage the queen for safety. Leave them thus until the queenless colony discovers its loss, signifying the same by running over the front of the hive in a confused manner, flying a short distance and returning. Now, take the hive-body containing the queenless colony and set it on the hive to which it is to be united, and the work is done. Move everything away from the old stand so that it will not look like home to them.

I do not have any trouble with the bees that I get in the hive returning to the old stand. Being in such a perilous condition—hopeless queenlessness—and then being suddenly ushered into a normal colony, they seem to make themselves at home.

After a half-hour I set a hive body with a comb in it to catch the flying bees. When they have all clustered on the comb, they are shaken into the other hive. In case the bees do not know how to treat their visitors, but go to wrestling with them (which is hardly ever the case if enough peppermint is given) give them a good, sound smoking; dropping a little tobacco in the smoker, to teach them better manners. In two days remove the cage containing the queen; tack a piece of wrapping paper over the hole in end of the cage. Punch in the paper several pin holes. The bees, in their effort to get at the queen, will soon tear the paper off and liberate her.

PRINCIPLES OF BREEDING.

Like those who raise sheep and cattle beekeepers are breeders of live-stock. The first principle in breeding—the one which every breeder accepts as sound and worthy of all acceptance—is that “like produces like.” This is a rule as old as the Scripture that affirms its truth by asking, “Do men gather grapes of thorns or figs of thistles?” It is even older, for you all remember Jacob, the thrifty keeper of the flocks and herds of his father-in-law Laban, and how wisely he managed the breeding, with the inevitable result that “the feeblers were Laban’s and the stronger Jacob’s.”

We expect the offspring to be like the parents. We are sure that the little will not produce the great; we are no less sure that the large will not produce the small. We expect the striking characteristics of the parents to be repeated in their children.

The first rule, then, to be kept in mind by the breeder is, that to have the best he must breed from the best. This is the law. He who violates it suffers the penalty which most of us must bear as best we can, and get along with what is worst than the best.

But the law that “like begets like,” must not be interpreted too rigidly. Each of the higher animals has two immediate parents, and grandparents without number, and they all have their influence under the same law. The father and the mother are never exactly alike, and the differences in the grandparents are likely to be greater in number, if not in degree. You have seen children with the appearance of the father and the disposition of the mother—the outer characteristics of one parent and the inner qualities of the other. One child may inherit the weakness of the father and the strength of the mother; another may receive the endowment of the unfortunate, the imperfections of both; while one in ten thousand may unite in himself all the good gifts which both his parents could

transmit. These choice products of fortunate unions are the hope of the human race; among the domestic animals they are the seed and the secret of progress and improvement.

The great breeders of cattle, horses and sheep recognized these facts, and realised that if they would improve their stock they must breed toward an ideal. To be able to predict results, they must be able, in a measure to control conditions. This control of conditions in breeding means nothing less than to control the mating of the animals. Without such control there can be no systematic progress in breeding. The intelligent breeder must know his animals, their weak points, as well as their characteristics of strength, and he must bring such animals together as will neutralise each other’s defects, and accentuate the points of superiority.

I have spoken of heredity and of what is called variation. These are the fundamentals in breeding. Heredity determines the type. It holds to what has been gained. It declares that the young shall be what the parents are. Variation provides for progress. It does not annul the law of heredity. It supplants it and we hope for, just as it has makes possible the improvements made possible the development that has brought all organised animal and vegetable life to its present stage. Heredity is conservative, holding to the doctrine that it is better to retain what is good than to run the risk of spoiling it by struggling toward the unknown. Variation is not satisfied. It insists on making experiments. It has built the breeds.

The breeder has his evil genius. Heredity, or conformity to type, is at the bottom of his business. Given the breed or type suited to the man and the situation, and heredity will keep it substantially as it finds it. Given a man who is a real breeder, and he will take advantage of heredity and variation, and improve his animals by selection, by in-and-in breeding, by cross-breeding, and by feed-

ing and care. All the while he must guard against his evil genius, which the wise men call atavism or reversion. Every observant breeder has seen its effects. It is also called "breeding back," "crying back," "throwing back," and other self-explaining names.

Some of you, no doubt, have supposed that I would speak of breeding bees or breeding queens. How could I, knowing nothing on the subject? To open the subject for discussion, let me ask a few questions, first reminding you that I have already called attention to the necessity of controlling conditions in breeding.

There are many who advertise tested queens and pure queens of the several well known strains, and I believe that there are some who advertise pedigreed queens. Do you know any breeder who controls the mating of his queens? Do you know anyone who can say with confidence that his queens have been fertilized by strong, healthy drones from colonies that are successful honey-producers? Or, is it true that the breeding of bees is practical natural? Is it true, as I in my ignorance have been led to suspect, that the breeders of queens for the market are not true breeders at all—that they are not sure of the ancestry of the queens they sell, and know nothing of the mating? Is it possible to control the breeding of bees and provide a pedigree that will be a trustworthy record along both male and female lines?—Read by D. W. WORKING, at the Colorado State Convention.

CANDIED HONEY.

FRANK EVALD.

Yes! Mr. Parry, I do consider it most unwise of you to make a statement that is not true, and likely to cause injury to both beekeepers and honey dealers alike, and that was my only reason for contradicting same. In so doing I referred to a case in point. You seem to doubt that I kept honey for three years. Well, it is nevertheless true, and I wish to add that that

honey was kept in a room where there was no fireplace and it (the honey) was never heated.

During seven years' experience with yellow box honey in Cootamundra district I never knew same to candy and last year's ditto in this district with same results satisfies me as to these districts that yellow box honey does not candy. Perhaps beekeepers in other parts will give their experience. Any surmising in the way you suggest need not be made from my last remarks, as I stated the truth with no other intention than reputing an untrue statement.

If you feel chagrined because some beekeepers are praising their honey, surely you, in your overflow of brotherly love should not brand all that obtain honey which does not candy and even the dealers that handle their honey as dishonest, which you practically do.

Are you coming down a little? You say "I say now, as I have said before, that honey is faked or doctored." You said before that all honey that did not candy was doctored or no honey at all. And then you explain that the term doctored only means that the honey is heated to a certain point. I know nothing about heating honey to prevent candying, but to liquify honey that is candied by heat is no trade secret, and rather than concealing the fact, myself and others have got directions for doing same printed on their labels.

Now, don't you think that 99 persons out of every hundred took your term "doctored" to mean that some stuff was put in. For instance, acid, as you yourself advised in this very paper two years ago. As the matter now stands, you seem to be positive from theory, that no honey remains liquid through our winter temperature. I am equally positive, from practice, that some honey does remain so, and as this is a matter of some importance it is desirable to come to an understanding, so I wish to call upon beekeepers with experience to contradict me if I am wrong or support me if I am right. It must

be understood that I refer to honey extracted when ripe only.

I have said nothing about honey that candies; we all know that some of the best honeys in the world, for instance white clover, candies very soon after being extracted. You draw an imaginary comparison of two honeys, one candies and the other does not, and ask if they are of the same composition. Who says they are? But may they not both be pure honeys. That is the question at issue.

FORESTRY.

TO THE EDITOR OF S.M. HERALD.

SIR,—In your issue of 28th instant appears a cablegram, from which it appears Mr. Copeland has made a statement to the effect that for a supply of hardwood the resources of New South Wales are virtually untapped. Such a statement shows how ignorant Mr. Copeland is on these matters. Only a day or so ago our Railway Commissioners were complaining of the scarcity of hardwood for railway sleepers, and wondering where they are to get the sleepers in a few years to come. The members of the State Parliament appear to be equally ignorant, with the exception of a few, or else this matter of forests would have been properly legislated for years ago. A few years ago, when the Premiers of these States were all in England, they praised up our timbers as "second to none" in the world. At the same time they made no effort to preserve them. They allowed leaseholders to ringbark, almost without restriction, valuable timber on Crown lands. Surveyors are sent to measure out certain tracts of land as timber reserves. Much of this land is useless for timber. The best timbered is handed over to the grazier to destroy. The Governments appear to care very little about the destruction of timber; they think how much the land is improved by ringbarking. I have been over a good part of New South Wales, and have seen thousands upon thousands of acres of the most valuable hardwood timber in the

world allowed to be destroyed on Crown lands by leaseholders. And so our forests are being destroyed year after year through the incompetence of those that have the forests under their control. I am, etc.,

CHAS. U. T. BURKE.

Lyndhurst, August 30.

LONDON NOTES.

BY THE DRONE.

Quite an interesting little correspondence has been maintained in the "Daily Mail," a halfpenny morning paper, about profitable beekeeping for English people. First of all someone wrote saying how interesting the pursuit was, and giving the usual calculations that if one hive will earn £5 in one season, how much will a hundred hives yield? We Australians, who have kept bees, know how these calculations work out. Then another man wrote saying he would sell out his stocks of bees that cost £3 each for 7/6 apiece. Next a beekeeper wrote in triumph that he had a few hives, and last season he sold all his honey to customers at 1/ per lb., and could have sold twice as much had he produced it. No figures were given. Afterwards another beekeeper wrote saying he had offered his crop of honey to grocers at 8½d. per lb. in 1lb. bottles, stoppered and labelled, but none would buy. Of course not. Why should they? Grocers can buy honey as good as English honey at £30 per ton, and can retail it at £112 per ton, and they are not such fools as to pay any beekeeper even £56 a ton while they can do this. For all that the lesson to Australian beekeepers lies in the last two letters. It shows that where the consumer is applied to direct, honey is purchased—even at the highest prices. The factor governing these purchases must have been a knowledge of the purity of the article, its excellence, and that it was conveniently obtainable. Now, if Australians could command these features of trade, they could readily sell thousands of tons of honey at remunerative prices

in England. Even if they could alter the existing state of affairs in the wholesale trade, an improvement would follow—but then only a slight one. The honey trade, to be absolutely successful, will need combination at the Australian end, and advertisement at this. The whole is a matter for brains and energy to accomplish—nothing more. The honey, if retailed here in 1lb. jars at 6d, would sell “like hot cakes,” as the auctioneers say, and once get the produce on the market, the demand would be steady and permanent. Co-operation on the part of the beekeepers in Australia would be essential. If the Government of Victoria could be induced to assist by bottling the honey on their premises in London, and selling it—the experiment would be at least inexpensive. Mr. G. W. Hall, who has charge of the Government agency during Mr. Sinclair’s absence, is in favour of such a scheme being tried. The only hindrance appears to be the Australian beekeepers themselves, who, while possessing “associations” without number, have no one to put into actual operation any scheme for the profitable disposal of their produce. It is a pity.—*Australasian*.

DRONES.

G. M. DOOLITTLE, IN *American Beekeeper*.

To keep all drones out of a hive, means the opening of that hive every twenty days, and decapitating a few hundred drones in their cells; for where all drone comb is removed, drone cells will be built in all sorts of out-of-the-way places, for I have yet to see the hive containing a populous colony, one strong enough to send out a prime swarm that had not a few cells of drone-comb in it; and I do not believe that these few cells can be kept out, for worker comb will be cut down and drone built in its place if a few cells cannot be gotten otherwise. From my experience in the past, I would say that it is not practical to try to keep all drone comb out of any hive, but rather have just one frame in each and every

hive, having from ten to twenty square inches of drone-comb in it, and have such comb stand in a certain place in each hive, so that the apiarist may know just where it is; then every twenty days open the hives from which it is desired that no drones shall fly, and decapitate them, thus making a sure thing of the matter, and fully satisfying the bees. In this way you will not have a few drone-cells scattered all through the hive, nor will you have to use a drone-trap at the entrance of such hives to catch undesirable drones, the same making quite a cost and much work for the beekeeper, in putting them on and emptying the same; besides a general bother and disgust to the bees, when first put on, and at times of the flight of drones and young bees. If this comb with drone-cells is placed near the outside of the hive, and the drone-comb is near the top-bar of the frame, you will not have to decapitate the drones more than two or three times during the season, for the queen will be slow in depositing eggs in it; and when honey comes in so the bees begin to prepare for winter stores they will fill it with honey, thus keeping the queen from depositing any more eggs in it that season.

If, in addition to the above, the top bar to the frame, directly over this spot of drone-comb is painted white or red, you will know just where this comb is, without taxing your memory with the matter; and this will tell you exactly where such frames are, should they become displaced at any time through your manipulations, by way of spreading of the brood, giving colonies which are short of stores frames of honey, etc.

The last “fad” in the United States is long-tongued bees, and a demand created raising prices to \$10, \$15, \$25. Doolittle says “Go slow.”

Honey in comb sent from California to Chicago per rail costs 6 cents a pound freight by new railway regulations. It is reckoned a serious matter by the California producers.

RINGBARKING.

[BY LOYALSTONE.]

For the last six or eight years I have been agitating for the preservation of our forests. I have travelled over most of New South Wales, and witnessed for myself the worthless destruction of timber. I have written many letters to different papers throughout the State on this subject, and have written to many members of Parliament, who promised in reply to do all in their power to prevent the destruction of timber; but who up to the present time have done little or nothing. Timber is either most ignorantly undervalued by our legislators, or else there is some "political jobbery" about it. The majority of timber inspectors are unfit for their office, not knowing the difference between a box and a gum tree. I have known some of them to condemn yellow box timber (sound) and accept white gum timber for railway purposes. Surveyors are sent out to different parts in the State to reserve and survey certain tracts of country for timber reserves—many of these reserves are useless for timber. The grazier appears to have a say in these timber reserves, as he leases the ground with the best timber. Good timber only flourishes on good grazing land. Permission is asked to ringbark this leased land. It is granted with certain restrictions, that is: To leave all valuable timber to the extent of about 3 trees to the acre. This is all the grazier wants; he starts and ringbarks everything, leaving a few clumps of green trees here and there. The inspector comes out to see how the conditions have been fulfilled; is met by the grazier, treated like a toff, and sends in his report "conditions fulfilled," without examining whether the timber left is valuable or useless, straight or crooked. I could write more fully on this subject, but what is the use of it? No good will come of it unless united action is taken in the form of a deputation of beekeepers, saw-mill proprietors, and timber merchants, and point out without fear or favour to the Minister of

Lands, how his Government is allowing the forests to be destroyed without making provision for the future, and endeavour to persuade him to at once put the forestry question on a sound basis. It wants men at the head of it with a thorough knowledge of their business, likewise their servants under them. It is time that this pitching of "nincompoops" into billets that they have the least knowledge of was stopped. What is wanted is Forestry Commissioners (like the railway department), free from political control or influence. The first great object of beekeepers is to have their forests preserved. Let us all work for this one object, until we achieve it. Keep on with the help of timber merchants, and saw-mill proprietors, worrying our State Parliament until they grant us our desires. When this is done then it will be time to talk of the price and export of honey, but not till then.

GOVERNMENT LEASES.

Department of Lands,
2nd September, 1901.

SIR,—Referring to your letter of the 3rd ultimo on behalf of the Bee Farmers' Association, suggesting that provision might be made for the leasing of small areas within Forest Reserves for the purpose of apiaries. I have the honor, by direction of the Secretary for Lands, to inform you that the special lease provisions of the existing law would appear to meet the case at present.—I have the honor to be Sir, your obedient servant,

H. CURRY,
Under-Secretary.

R. A. Price, Esq., M.L.A.,
Legislative Assembly.

September 3, 1901.

E. Tipper, Esq.,
Willow Tree.

Dear Mr. Tipper.—You will see by the enclosed that the Crown Lands Act will enable you to make the necessary application at the present time. Perhaps it is not generally known by the members of your Association; that special leases can be obtained upon any reserve in the colony of N.S.W. I think that this will fully meet your case.

Yours ever,
R. A. PRICE.



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H. L. JONES, Goodna, Queensland.

W. M., Bathurst, writes; I got six queens last season from H. L. Jones, Goodna, real beauties, splendid honey gatherers. I intend to get six more this season.

VICTORIA.

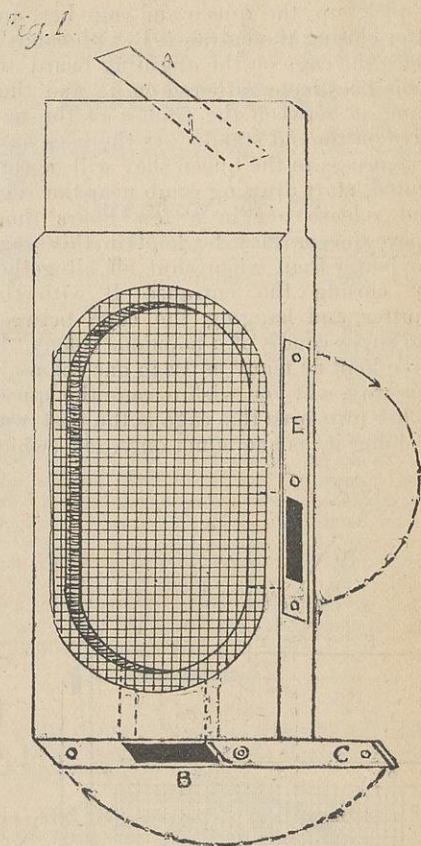
VICTORIAN NOTES.

R. BEUHNE.

INTRODUCING QUEENS (continued from August issue.)—There is an error, printer's or my own in the previous article, page 113, the sentence: "Something unforeseen would make a call upon my hive" should read upon my "time."

My present method of introduction is based upon the fact, that, so far as my experience goes, worker bees admitted to a cage containing a queen only will treat her kindly. I replace my queens with some exceptions after the second season, and to test this point I experimented largely with these condemned queens before I ventured upon risking others. So far, however, there appears to be no risk whatever.

Fig. 1 is the cage I use for introducing, and also for releasing queens at swarming time. It is $4\frac{1}{4}$ inches long, $1\frac{3}{4}$ wide, and $\frac{1}{2}$ inch thick. The top end is thinned to $\frac{1}{4}$ inch for one inch downward to allow of its hanging between wide and thick top bar frames without having them out of their proper position. A is a strip of tin, turning on a nail, suspending the cage between the combs. B is the entrance for putting in the queen or letting her run in in the case of swarms. C. when turned round closes the entrance. D is the side entrance, closed to the queen, but open to workers, but closed altogether by turning E down on to D. When using this cage I put the new queen into it by herself, close the entrance B by pressing candy into it, remove the old queen which is to be superseded, and hang the cage with the new queen between the brood combs. The queen will put her head out through the queen excluding perforation D, and the workers outside the cage will commence to feed her at once, and finally go into the cage with her. The queen



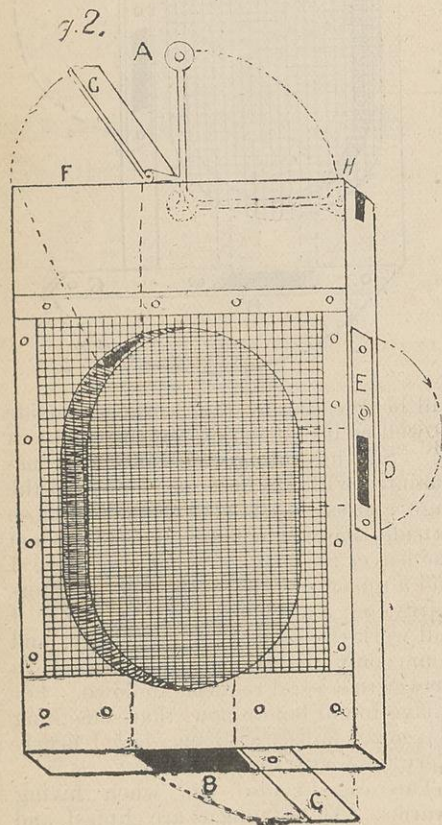
will be released by the workers outside as well as inside, eating out the candy in B. She has already become well acquainted with the bees which entered the cage, and as they are the brothers of those outside, she will not be molested when she leaves the cage. In no case have I had a queen worried in the cage or afterwards, but I am not going to say that it will work the same with everybody, and I am only describing this method in answer to several requests to do so. For I have found before now, that something that never failed with me, failed nearly every time with someone else.

This cage I also use when hiving swarms. All my queens are clipped, and

I pick up the queen and cage her, and after closing the entrance B with candy I place the cage on the alighting board till some bees have gathered on it, and then hang it between the frames of the new hive on the old stand. As the bees have free access to the queen they will be contented, start drawing comb near the cage and release her in a few hours time. Spare queens may be kept in this cage far better than when shut off altogether by closing the entrance B with the shutter, and hanging the cage between the super combs of a populous colony. I have kept as many as 12 in one colony in this way. If you wish to cage the queen in her own hive this cage is the best way of doing it, as she is not only fed (which

she could be through the wire cloth), but also groomed and properly attended to.

The cage Figure 2, can be used for all the purposes of No. 1, in addition to which it may be used for hatching queen-cells. The cell is inserted into F closed by the lid G. The measurements of the cage are $3\frac{3}{4}$ inches long, $2\frac{1}{4}$ wide, $\frac{3}{4}$ inches thick. The cage may be used singly or in a nursery frame, a Langstroth frame will hold twelve, two rows with two pair in the centre, and a single cage each end in each row, with passage between the pairs and the end cages to allow the bees to enter through the D entrance. Any number of cells from swarmed stocks or artificially raised may be hatched, and the young queens kept in perfect condition if the frame is kept in a queenless colony. If kept in a colony (strong) having a queen the cages are supplied with food, and the D entrance closed by turning E over it. The suspender A through the loop in which a piece of wire, nail or wooden match is put when hanging it between frames is turned down into a groove H when the cages are used in a nursery frame. However, you must be sure that your queen excluding perforation is the exact size. There seems to be some considerable variation in the queen excluding zine on the market.



WORKERS CONTROLLING BROOD-REAR-ING.—I have always been of opinion that in spring and autumn, and in a lesser degree throughout the season, the workers control the amount of brood raised. Most beekeepers have no doubt noticed that all the eggs laid by the queen are not necessarily raised; this is particularly noticeable at the end of the season, there will be eggs and sealed brood only, in a hive for many days. But the workers also control the laying of the queen. To satisfy myself on this point I exchanged queens between four colonies of blacks and four of Italians late last autumn. The blacks were still raising brood, but the Italians had ceased altogether. When the black queens were introduced to the Italian stocks they stopped laying and the

Italian queens commenced to lay afresh in the black colonies. To some black colonies I introduced Italian queens later still, when even the blacks had ceased rearing brood. These are now in splendid condition, as they started brood-rearing just as early as they would have done with black queens, and they had the advantage of the greater prolificness of Italian queens. Thus, if Italian drones were wanted early in spring, an old Italian queen could be given to a strong colony of blacks early in winter.

VICTORIAN APIARISTS' ASSOCIATION.—In the matter of suggested close season for wild bees, the replies of members of the Advisory Committee and the Executive Council, show that all, with one exception, are against the proposal. The following letter has been sent to the Secretary for Agriculture:—

September 10, 1901.

The Secretary for Agriculture,

SIR,—In reply to your letter of 20th July, containing a suggestion to prohibit the robbing of bee trees during the winter months, we beg to state that the matter has been submitted to the Executive Council, and the advisory committee of this Association

The replies embodying the views of members and other beekeepers consulted, are now all to hand, showing that: All are of opinion that legislation would be ineffective, all but one are in favour of bee-trees being robbed in winter, or at exactly the opposite time to that suggested on account of the danger of spreading disease by taking bees nests during the breeding season, and also on account of the risk of originating bush fires, as bee trees cannot be taken without the use of fire.

A majority should like to compel bee hunters to burn all refuse after robbing a tree

It would be much better for our industry if there were no wild bees; they benefit no one but a few bee hunters, spread disease, and cause the destruction of the tree they inhabit. The honey from trees is inferior and detrimental to the expansion of our market.

There need be no fear of the extinction of wild bees as the bush is continually restocked by swarms absconding from beekeepers, and the protection of wild bees is against the interests of beekeeping — Respectfully yours.

THOS. BOLTON, President,
W. L. DAVEY, Secretary.

R. BEUHNE, Correspondent.



QUESTIONS.

Question No. 11.

Reduction of Fees for Ringbarking.

We copy the following from the *S. M. Herald*:—

Ringbarking on Settlement Leases.—The question of the maximum fee charged to holders of settlement leases for liberty to ringbark timber on their holdings has been brought under the notice of the Minister for Lands by Mr. D. R. Hall, M.L.A. It appears that the Crown makes a charge for the right to ringbark the timber in order to retain control of it, and the amount has varied according to different cases, the maximum sum charged being £4. Mr. Hall pointed out to the Minister that this charge is the cause of much dissatisfaction to lessees, and Mr. Crick said he could not abolish it, but would reduce the maximum to £1. New regulations in consequence of the reduction are being prepared in the Lands Department.

MR. ANDERSON.

11.—If the government is going to ringbark the trees they will spoil both the beekeepers' and timber getters' industry.

J. J. DONNELLY.

11.—Re ringbarking, I would not like to see the fee reduced, as there is much valuable timber on some of those leases, and if such be reduced this timber may be ruthlessly destroyed. Timber which is very valuable not only to beekeepers but also for export and other purposes.

F. W. PENBERTHY.

11.—Let the settlement lessees get the reduction of the maximum from £4 to £1 for the right to ringbark if they can. It is not likely to make much difference in the amount of land rung, but may make a good deal of difference to the poorest settlers. To have any weight, we must protest against ringbarking mostly for the sake of the timber and rainfall.

PAUL MOORFIELD.

11.—Re question ringbarking, I think we ought to take action in the matter, as we want all the green timber we can get. I am sorry to say that all the timber round here on leased land has been rung so that it will make

no difference to me. But there are other beekeepers who it might affect, and if the fee is cut down I think it will tend to more ringbarking, and if it is not worth the extra cost to a lessee to pay for ringbarking, I think it would, if there were some beekeepers near, be worth that much to them; and I think we ought to do all in our power to stop it on Crown Lands, as green timber is getting less every year.

W. NIVEN.

11. We should protect all native timbers not only from a beekeepers point of view, but as one of national importance. The great object at the present time with land owners appears to be to deplete the land of all timber. Within the last two months, the owner of a property known as Horse Shoe Lagoon, on which grew some of the best gum trees on the Lachlan River, has had it all ring-barked, thus destroying valuable timber for bridge building and other purposes. There is no doubt tree planting will have to be carried out extensively in the near future to replace that which is being wantonly destroyed now. I am quite willing to support anything to stop the present destruction of our native timbers.

W. FERGUSON.

11. Re ringbarking on settlement leases. I think it is a mistake on the part of the Crown to grant increased facilities to lessees to ringbark. If the lessees are allowed to ringbark they will kill all or nearly all the timber on the land. In the past much valuable timber has been destroyed by lessees with the result that when the land was thrown open for selection, the selectors had no timber on their land suitable for building or fencing. If permission be given to ringbark, it should be with stringent conditions to preserve all the useful timber. In the past thousands and thousands of acres of splendid gum and fine forests have been ringbarked, which would today be worth more for timber had it been saved than the fee simple of the land. I am of opinion that (although the killing of useless timber is advantageous to the grazier) the wholesale destruction of the timber ultimately does more harm than good to the land even for grazing purposes. Therefore I think that it would be advisable for the beekeepers to form a deputation to the Minister and point out to him the injury to the country caused by indiscriminate ringbarking even apart from a beekeepers point of view.

See that your neighbouring beekeeper takes the "A. Bee Bulletin."

Honey Labels a specialty at "Bee Bulletin" office. Send for samples and price list.

QUESTIONS NEXT MONTH.

12. What is the cause of so many imported queens arriving in Australia dead, both from America and Italy.

F. EVALD.

13.—Does yellow box honey in your district candy in frosty weather?

14.—Is there any other honey that does not candy?

PREVENTION OF INCREASE.

When a swarm has issued, prepare to hive thus: In the centre of a temporary hive hang two combs; they may contain honey and brood, some of which should be unsealed larvæ. The object of these combs is to help hold the bees, furnish laying room for the queen and to hold the pollen that the bees may gather. On both sides of these brood-combs hang as many frames of sections as the bees will utilize. Let the swarm run in and set it a foot or two from the parent stock: or, preferably, if more swarms issue, exchange location with them. In three or four days the new swarm should be examined. If the queen deposits eggs in the surplus boxes, or if they are half, or more than half filled with comb, they should be removed and empty ones inserted in their place. A swarm can be returned to a parent stock in four days cured of the swarming fever, though I often retain them six days or even longer, according to the amount of work done in the boxes, or to suit my opportunity. I unite a swarm from one of those temporary hives with a parent stock as follows: Smoke both colonies well; dislodge the bees promiscuously in front of the parent hive; cut off all queen-cells. The two broad-combs from the temporary hive may be removed and used as desired. I now give plenty of surplus room above, as the bees take immediate possession of those newly-constructed combs in the surplus boxes taken from the temporary hive. Where the queen has deposited eggs in surplus boxes, they should be retained for four days or more till they become sterile. These boxes serve an excellent purpose as bait combs.—J. H. JOHNSON, in *American Beekeeper*.

N. S. W. BEE-FARMERS' ASSOCIATION.

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MILES.

RULES & OBJECTS.

1. The careful watching of the interests of the industry.
2. To arrange for combined action in exporting honey to relieve local glut when necessary.
3. To advise members as to suitable localities for establishing apiaries.
4. Any beekeeper can become a member on approval of committee, subscription 2/6 per annum.
5. That every member with more than 50 hives shall be allowed an extra vote for every additional 50 effective hives.
6. No member be eligible for office who has less than 50 effective hives, or his subscription is in arrear.
7. The Association to consist of a central body and district branches affiliated with it.
8. The principal officers be such as will undertake to meet each other in committee at least once in twelve months.
9. The officers shall consist of President, Vice-President, Treasurer and Secretary, and Executive Committee.
10. After the first election of officers, arrangements to be made by the Secretary to call for nominations for office-bearers, and issue ballot papers prior to the next annual meeting.
11. Supply dealers or commission agents cannot become members.
12. Members unable to attend meetings or conventions can authorise or nominate any member they know will be present to vote for them on any subject brought forward such vote or votes to be in addition to the member's present own vote.

J. R. G., Lismore, 23rd August:—I am sorry I have no suggestions to make in regard to the proposed meeting of the Bee Farmers' Association, but consider that there would be small chance of a good attendance of beekeepers at any meeting before, say, March proximo

W. E. B., Ballina, N.S.W., writes:—Here-with find postal note 2s 6d subscription to Bee Farmers' Association, which has my warmest sympathy. Selling is the most important item in our industry. Let us concentrate all our energies on this point and we are sure of success.

R. L., Taree, Manning River, September 2:—Yours duly to hand re suggestions. Marketing honey is to my mind the chief drawback we have to contend; our present system of selling is unsatisfactory without a doubt. A lot has been said on the subject, but very little has been done. I would like to suggest that we fall in with the Farmers' Co-operative Co. or start a Co-operative concern of our own. I will take ten £1 shares in either, (latter preferred.) Kindly bring this matter up for consideration at your next meeting.

P. M., Howlong, August 20, 901:—Dear Sir, you must excuse me for not writing to you before. I was sorry I was not able to get down to the meeting, but I hope if all is well to come to Sydney about Show time, hoping their will be a meeting then. I was very glad to read about your meeting being successful, and we want to keep at it and get all the members we can in the Association so that it will be a power in the bee world and its strength felt. Re your circulars about suggestions, I would suggest that we see if we could not federate with the Victorian Association, so that when we get the uniform tariff we will be able to help one another, as there is no doubt we would be all the stronger. And we might then have the power to be able to fix a price that we would sell our produce at. And also, if we could manage it, that we could get our honey goods from one source and so get better terms. We would then be able to speak with one voice in regard to any laws affecting our industry, and in fact in many ways. Another suggestion I would like to make is about some kind of a label for members of the B.F.A. I know most of our members have a label of their own, but could we not also get a small one that could be put under or over this one, and having that on would be a guarantee that the honey was good, and that it was from a practical beekeeper, as there is no doubt that honey sells better when it is known that it is grown by a practical bee farmer than by a box man. I do not think I have any more to say on the matter this time, but I hope you will have a good meeting, and you might remember me to our President. He is an old friend of mine. I had a look through my bees the other day and taking them all through they are doing well.

We have had a very dry winter up here, and things did not look so bright for next season, but we now have had a grand rain and prospects have improved. I am going to run about 60 colonies next season, that being about as many as I can put in my place, but if I can see a chance of their being a good sale I will go in for it on a much larger scale. It has not been a very good year round here for selling honey, and Sydney is too far to send it to, and I cannot get to Melbourne on account of the duty, but I hope it will be off next season. Wishing you and your paper and the N.S.W.B.F. Association success.

W. M., Bathurst, Aug. 21:—Would you kindly advise me through the A.B.B. I have my top boxes (which I took off the end of last season) full of combs. I want to know which is best, to use them for any new swarms I may get, or to use foundation for the new swarms and keep the combs to use when I put on the top boxes. They are combs I extracted. My bees seem to be coming through the winter very well, I have lost three swarms out of thirty-seven. We are getting splendid rain. I think the coming season will be a good one. I had no honey last year until the last five weeks of the season, in which I took half a ton. I am always pleased to get the "A.B.B." I never miss reading any of it. Hoping we shall all have a good season and good prices.

[You may use them either way. A good way is to put frames with starters between them. The starters will be worked out straight.]

C. D., Drake, August 27th:—I might state I am managing for my brother. I have 200 hives, all Italians, in both yards, three mile apart. There is no foul brood here but plenty bad seasons, too dry or too wet is the rule. There are no bee farms within thirty miles of me, only a few hives here and there. There has been several started but failed to make a do of it. This is a poor place for honey although there is timber of all sorts you could mention, and to look at it would think it a splendid place for bees. I think the soil is too poor. Crops will not grow here, mineral is the most plentiful thing we have. I sell most of my honey locally for 3d per pound. I send an odd ton to Sydney, but it don't pay. There

is every prospect of a good season here, hoping its the same with you.

W. M., Bright, August 16 1901,—I receive the A.B.B., regular every month and find it very interesting and useful reading on account of the number of hints one gets from it. My bees gave me a fair yield last summer, about 60lbs per hive, and also secured a fair supply for winter. They seem to be wintering alright, though I have not had a good look through them yet, but on a fine day they are out pretty thick and are working on the woodbine and other early flowers. I used the plain langstroth frame in my bottom boxes last year and spaced Hoffman in the top, and now on examining some of the boxes I find it impossible to move a frame, on account of them touching and being built together by the bees. As I am at a loss what to do to get them into straight frames which I can handle, I will feel thankful if you can, through the columns of your paper, advise me as to the best thing to do under the circumstances. Wishing you and your paper every success.

[Did you put starters or foundation in the frames? If so it will be only brace or burr combs, which a sharp knife will sever. Otherwise you will certainly have a mess to get them straight. When frames with starters are put in hives they should be put between full combs.]

J. E. P., Guildford, Vic., August 17:—I have had some bad seasons, but we had a very fair one this past year. We got 6s 6d per doz. for sections this week in the city at auction, and we have had 3d and 3½d for extracted. Hoping you will have a good season next year.

CARNOLIAN BEES.

DRONE, TATURA, VIC.

Could you kindly tell me through the next issue of the "A.B.B." if you have ever tried Carniolan or Carni-Italian bees and with what result as honey gatherers in hot climates, and oblige.

(Our experience with them was they were very great swarmers, more so than honey gatherers. And we were sorry we got them.)

Do you want anything in your apiary. Look at the list of our advertisers.

W. H., Dubbo.—For winter protection over the cluster I would suggest a bundle of straw, pressed in the ordinary marketing way in small bundles to fit inside a super and about 7 or 8 inches thick. And I think small bundles two inches thick might be pressed to hang inside the walls of the hive for weak colonies or thin-walled hives. One press could serve a whole district, and straw is cheap and warm, and is light to handle, and easily packed away during the summer months. Of course extra care of fire is necessary. Re battens in frames. If it is put in far enough to one side of the frame to allow the foundation to come fair in the centre of the frame, you could put in a full sheet of foundation without cutting from the batten space, and you will only have the batten space taken from one side of the comb surface. To stick labels on tin or iron, a cement that will stand water: A little rye meal with a solution of glue and water, and a little turpentine, but the cement must not be too thick. If too thick, thin with turpentine.

Very Useful.—An iron spoon 18 inches long. Either to work among cappings, or take live coals from fire to light smoker.

For Watering Bees.—Make a light wooden frame to fit size and shape of open tank or tub. Stretch wire cloth in it. The frame will keep the wire on top of water, and the bees will sip the water through the wire cloth.

New members dropping in their names and subs. to the N.S.W. Bee Farmers' Association nearly every week. We sincerely hope from the number of intelligent men belonging to it, representing as much interest as they do in the industry, by or at next annual meeting, much good will result. Every true beekeeper should be a member of it. Your influence in it is according to the number of hives you work, and even if you cannot attend meetings your proxy note is valuable.

An Austrian has invented a new kind of foundation, the cell walls being notched instead of smooth. The bees taken to it more readily than the ordinary foundation.

Root's new cover consists of two thicknesses of boards $\frac{3}{4}$ inches thick, separated by narrow strips of wood, one in each end and one in the middle, the top covered with roofing paper.

One of our most important proceedings at the present time, is to see the brood chambers have only worker comb. Drone comb will do in the supers to store honey in or next the sides of the hive in the brood chamber to store pollen in, but not elsewhere.

The following are the lists for which awards are given at shows at the leading United States Fairs:—Finest display of Comb Honey; Finest display of Extracted; Granulated Honey; Beeswax; Honey Vinegar; Extracting Frames; Nucleus of Yellow Bees; Nucleus of Dark Bees; Carniolan Bees.

To start bees in sections give first an extracting super. Then when they are working on that give a super of sections instead, with the bees that were working in the extracting super.

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