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The Australian bee bulletin. Vol. 5, no. 3 June 20, 1896

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THE AUSTRALIAN BEE BULLETIN

A MONTHLY JOURNAL, DEVOTED TO BEE

VOL. 5. No. 3. JUNE 20, 1896.

Per Annum 5s, booked 6s 6d; in Australasia, 7s 6d.



Every Beekeeper, to save money and moths, should melt up all waste pieces of wax and old combs unfit for use and send it along to us, and we will convert it into our usual high grade,

Comb Foundation, 6d. per lb.

(You pay carriage both ways.) Remember that all the wax will be carefully refined with steam under high pressure, so there is no danger of disease germs being left therein. Perhaps you do not require foundation, then we will take your wax in exchange for any goods we supply, or will give you cash if preferred, or you may prefer to try your hand at making comb foundation, we can then supply you with a COMB FOUNDATION MILL, dipping tank, dipping boards, etc., either new or second-hand appliances. We have several second-hand mills on hand, one of which we can do for £4 5s., or a new machine for £6 each.

PENDER BROS. (Late R. L. Pender),
MANUFACTURERS OF BEEKEEPERS' SUPPLIES,
WEST MAITLAND, N.S.W.

83 CASES AMERICAN * DOVE-TAILED * BEEHIVES.

Ex "SINTRAM," FROM NEW YORK.

I have just landed above, on which no duty has been paid, and as I wish to clear at once, quote cheaper rates than have ever before been offered, especially on original cases of 10 hives ($1\frac{1}{2}$ or 2 story.)

LISTS OF PRICES ON APPLICATION.

NOTE.—These hives are of the FINEST AMERICAN MAKE AND WOODS, and are cheaper than similar dovetailed hives made of unsuitable colonial timber.

R. K. ALLPORT,
CHURCH STREET NORTH SYDNEY.

Telephone.—No. 67, North Sydney

HONEY TINS.

| | | | |
|-----------------------------|----------------------|--------------------------------|------------------------|
| 1lb. Patent Lever Tops .. | 1/3 doz ; 12/- gross | 60lb. 1½in. (bung hole) | 10/- doz ; 110/- gross |
| 2lb. " " .. | 1/9 " ; 17/6 " | 60lb. 2in. (lever tops) .. | 10/- " ; 110/- " |
| 4lb. " " .. | 2/6 " ; 27/6 " | 60lb. 1½in. (screw tops) | 11/6 " ; 120/- " |
| 7lb. " " .. | 3/- " ; 32/6 " | 60lb. 3in. " " | 12/6 " ; 130/- " |
| 14lb. " " .. | 7/- " ; 75/- " | 60lb. 4in. " " | 13/- " ; 135/- " |
| 28lb. 1½in. (bung hole) .. | 7/- " ; 75/- " | HONEY JARS. | |
| 28lb. 2in. (lever tops) .. | 7/- " ; 75/- " | 1lb. (screw caps) .. | 2/6 doz ; 27/6 gross |
| 28lb. 1½in. (screw tops) .. | 8/6 " ; 95/- " | 2lb. " " .. | 4/- " ; 45/- " |
| 28lb. 3in. (screw tops) .. | 9/6 " ; 105/- " | 2½lb. " " .. | 4/6 " ; 48/- " |
| | | 1lb. (tie over) with parchment | 2/3 " ; 24/- " |

Hebblewhite & Co.,
377 GEORGE-ST., Opp. Sydney Arcade & Strand, SYDNEY

Come to Goulburn Conference, and inspect our Samples.

— PROGRAMMES POSTED ON APPLICATION. —

The Beekeepers' Supply Co.

FRANKLIN STREET, MELBOURNE, VICTORIA.

Catalogue for this Season Now Ready, with Revised Price List,

CONTAINING THE FOLLOWING RECENT ADDITIONS—

THE LONGITUDINAL HIVE of 20 frames, with contracting boards, is specially a labor saver. It may be readily expanded or contracted to meet the necessity of the season. Two or more queens may be kept in one hive, and the stock amalgamated under one queen at any time, or the reverse proceeding be instituted for queen rearing. This hive will be found most suitable for the production of wax, supplying as it does ample clustering room.

THE REISCHE FOUNDATION PRESS.—This is without doubt one of the best recent additions to apiarian appliances. Foundation may be made at very slight cost of labour. Capacity 3 to 4lbs. per hour. No other appliance necessary. Foundation made by this process, while somewhat thicker than roller-made, is lighter in texture and more readily accepted by bees.

V-EDGE HOFFMANN FRAMES.—Having put in requisite machinery, we now supply these at slight advance upon ordinary 7/8 Frames.

THE "COLONIAL BEEKEEPER," a handy Primer for Beginners. Price, 1/2 posted

SEND FOR ILLUSTRATED CATALOGUE.

The Bee-keepers' Supply Co.,
FRANKLIN-ST., MELBOURNE.

OF COURSE YOU ARE FEEDING.

Almost every Beekeeper has to feed after such a season we have had! Well if you have not done your feeding we will tell you how to do it without starting the bees at robbing. We have put this method to some very severe tests, and even while robbers were at work, and everything was an immense success.

During the season 1894-95, Mr. H. R. Boardman, a leading American Beekeeper, perfected a new feeder—the Boardman Feeder—when it was first described, we could not see that it had any advantage over feeders then in use, and decided not to test it, but a few weeks later an order came for 6, and when completing the order we made a few for trial. When put on the hives we were surprised at the results. A colony of bees can even be fed, liquid honey in the middle of the day, and not induce the usual excitement consequent thereon. This result caused us to make a number for use in Drumpin Apiary, and we can find no fault with them and find every advantage. 1st. It combines an inside and outside feeder in one, inside in that the bees do not leave the hive to get to it outside, in that the beekeeper can fill it with food without touching the hive, and at the same time it can be seen if full or empty.

METHOD.—Prepare the syrup in your usual way and fill the feeding bottles, taking care not to spill any syrup on the outside of the bottle. Screw on the atmospheric screw cap and carry the filled bottles into the apiary, having the wood part of feeder already fitted to the hive, at each hive to be fed quickly invert one of the bottles and place it in its place for the bees to empty at their leisure.

We can supply these feeders, pint size at 1/3 each; 5 for 1/2 each; quart size, 1/7 each; 5 for 1/6 each.



SIMPLICITY FEEDER.

We can also make the Simplicity Feeder which has been so long in use as to make comment unnecessary, at 3d. each, 2/9 per doz., not less than 5 doz. at 2/6 per doz.

See Prices of Imported Ligurian Queens in A.B.B. of March.

IMPORTED QUEENS.

Owing to the late enquiries for Imported Ligurian Queens from Italy, we have decided should we receive a few more orders to send for a second shipment to arrive in October. Price 25/- & 30/- each, half cash with order. For further particulars see our advertisement in March A. B. Bulletin. All orders to be in before June 15th.

AMERICAN QUEENS

EITHER GOLDEN OR THREE BANDED.

We will have a consignment about OCTOBER, and will be pleased to book orders for tested queens at 20/- each, half cash with order. All orders to be in by July 1st. Prices quoted for American bred CARNIOLAN Queens if required.

All our imported Queens come by freight (not mail) in nuclei, thereby securing queens in the best of condition and our experience proves them to be longer lived.

PENDER BROS.,

Manufacturers of Beekeepers' Supplies,
WEST MAITLAND.

VICTORIA.

Beekeeping Friends,—I can supply you with QUEENS THAT ARE UNSURPASSED FOR QUALITY, and GUARANTEED SAFE ARRIVAL and satisfaction to ANY OF THE COLONIES.

I attribute my success to the fact that I have obtained the past seven or eight years fresh breeding queens every season from different places and most noted breeders in Italy and America, and have just landed a very select breeding queen from Mrs. Atchley, Texas, who gives her a very great character

FOR CIRCULAR AND PRICES WRITE TO

JAMES McFARLANE, LYNDHURST, VIC.

EARLY QUEENS FROM QUEENSLAND

ONE of the prime essentials in the successful production of honey is the possession of prolific queens, and the beekeeper who ignores this fact by allowing old and unprolific queens to do duty in any of his colonies will not be in it with the wide awake apiarist who sees that each colony is presided over by a vigorous queen only. If you require queens of this latter class (the fruits of thirteen years careful breeding from the best stock obtainable from the world's most noted breeders) kindly send along your orders, and whilst thus having an eye to your own interests, also afford me an opportunity of illustrating the degree of proficiency to which I have attained in the breeding and mailing of queens. I am so situated that I can forward queens any day throughout the year, and if you wish to commence the coming season with vigorous young queens let me book your orders now, for delivery after 1st August. My home yard is stocked exclusively with Italian and I have now available as fine a lot of young queens as were ever raised. Carniolan Queens are bees, bred in my out-apiary from imported mothers, and are mated to Italian drones. All queens are sent post free and safe arrival guaranteed to all parts of Australasia. We have no foul brood in Queensland, and my apiaries are entirely free from disease of any type.

| | One | Three | Five | Ten |
|-------------------------------|------|-------|------|------|
| Untested Italian Queens .. | 5/- | 13/- | 20/- | 39/- |
| Tested " " .. | 8/- | 22/6 | 35/- | 67/6 |
| Select Tested Breeding Queens | 15/- | 42/- | 65/- | — |
| Carni-Italian Queens .. | 5/- | 13/- | 20/- | 39/- |

"The Italian Queen you sent me last Autumn is really a gem. Her bees are excellent honey gatherers and would please the most fastidious as to appearance, and what is better no signs of disease. I can quite coincide with the many flattering tributes paid you in the many testimonials you publish as thoroughly deserved."

—G.S.H., Cootamundra, N.S.W.

"The five untested queens that I received from you have turned out splendidly and are doing real good work. Their progeny are now flying and they look among the black bees as a gleam of sunshine on a cloudy day, and they are all pure Italians."—R.T.S., Port Macquarie, N.S.W.

"I received the bees safe and sound, every bee alive and lively as could be. The breeder you sent is a beauty, her working bees are nice and her drones the best I have ever seen."—W.N.W., South Australia.

"The two queens you sent arrived in first-class order, all nice and lively, and not a dead bee among the lot."

—W.L.A., Nelson, N.Z.

"Re Tested Italian Queen, no one could wish for a better. I have some 80 queens raised from her and to say I am pleased with them would be putting it too mildly."—J.C.F., Gympie

"Queens arrived safe and were in splendid order; no wonder you get great praise for the way you sent your queens."—S.B., Binnaway, N.S.W.

H. L. JONES,
Goodna, Queensland.

Queensland Agent for the "Australian Bee Bulletin."

Railway Concessions

FOR

GOULBURN CONFERENCE.

Every effort has been made to secure free passes but without success.

The Railway Commissioners have kindly consented to give Delegates the concession of travelling at single fare for the return journey. Those wishing to attend must apply to the Hon. Secretary, H. Rawes Whittell, 70 Hunter Street, at the earliest possible date.

Applications not to hand by the 25th inst. will be too late to secure the above reduction.

H. RAWES WHITTELL,
Hon. Sec.

The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

MAITLAND, N.S.W.—JUNE 20, 1896.

THE Ringbarking Appeal Case has been heard. Through Mr. Taylor's not residing on the land complained about, the case was ruled out of Court, but the Board, considering the importance of the matter in the public interest, referred it to the Minister for Lands. As we have the pronounced opinion of that gentleman on the question, page 68 of this issue, we have no fear of the result, and beekeepers who have apiaries on land with an uncertainty of their honey trees being destroyed, or those

who may be looking forward to place their apiaries among good honey bearing timber, can feel more hopeful than they could before. But beekeepers should remember that these advantages are not gained without great personal trouble, expense and loss of time on the part of the officers of the N.B.K.A.,—who reaps no more benefit than other beekeepers—and that legal expenses had to be incurred. And we therefore appeal to every beekeeper to encourage the good work thus going on—and there's more important work yet ahead—by joining the N. B. K. Association, and so not only give encouragement to those who work, but help and assistance in the shape of the necessary funds by your subscriptions. Will those who attend the coming Convention and those who are not able to attend, think these remarks over, and act accordingly.

For the work of the apiary for next month we cannot say more than we said last month, other than to urge the utilisation of spare time in the preparation of hives and frames, painting them, &c. In most parts of Australia the winter has been very much better than last. Instead of the drought and bitter cold winds of twelve months ago, genial showers with alternate sunshine portend a beautiful spring and bountiful honey flow.

We shall be at the Goulbourn Convention and while there be glad to receive subscriptions, advertisements, orders for labels, &c.

Send numbers of last volume, April 1895 to March 1896, and 3/6 and a bound volume of same will be sent per return post.

We have to hand Messrs A. I. Root's new Catalogue of Tools and Household Specialties. A very complete list of most useful and necessary articles for household and other purposes.

The beekeepers of Molong have made a good start in the formation of their Association. The opening address of the President, Mr. G. Packham, was very practical, and the beekeepers of the Molong district need only read that to be convinced of their positive duty in joining and working heartily with it.

Mr E. J. Rein, of the Hawkesbury Agricultural College, paid us a visit during the past month. He was on his way to visit a sister at Dungog. While at Maitland, in company with him, we paid a visit to Mr. Pender's Apiary and Poultry Farm at Drumfin. Mr. Rien alike with Mr. Pender is greatly interested in poultry and caponising.

In another page will be seen a very excellent "suggestion" from Mr. H. M. Davey, a Victorian beekeeper. The Eucalyptus flavour of Australian honey, instead of as has hitherto been the case, its detriment on the home markets, ought to be its grand qualification, and for that very reason ought to give our honeys a special value. This is the direction in which Australian beekeepers should work with might and main.

We call attention to the advertisement over leading article of this issue. Owing to not being able to secure free passes as on last occasion, we cannot expect such a large attendance at the Goulbourn Conference as was at Bathurst, still as there are many matters of great importance to be considered, among others, the rules and constitution of the N.B.K.A. we are sure that every beekeeper who feels the interest of the industry at heart will do his best to be present.

In reply to H. J. Gardiner as to whether five and six eggs in a cell is a novelty, it might be done by a laying worker, or a vigorous young queen, not having bees enough to attend to her. Are you sure there was a queen in the hive? Foul brood does not attack adult bees, only larvæ. As to whether the South Island of New Zealand is a good place for honey producing we cannot say but should imagine it equal to any other part of the Australias.

This issue is a week before its usual time, in order to assist on the Goulbourn Convention. We do not think our many friends will object.

The following appeared in the Maitland *Daily Mercury*, two days after the N. B. K. A. Committee had interviewed the N. S. W. Minister for Lands, re-erring-barking: "It having been reported that trees on military reserves have recently been cut down by troops, officers commanding are directed to take such steps as will prevent a recurrence of this practice. This we suppose is in deference to the wishes of the Beekeepers' Association."

A lady correspondent of a Sydney daily newspaper, writing from Nice in Italy, where the Queen was then staying, says:—"We delight much in the people and in the gum-trees. Australians have no idea what lovely trees these are when properly cultivated. I wish I had my camera to get a photo of them. The little town is thoroughly scented with eucalyptus, and the honey is strongly flavoured with it." Arbor day is now coming round, and thousands of trees will be planted in parks and school grounds. Will beekeepers be alive to recommend the gum trees?

A Mr. Bellamy has been writing to the American bee journals, and had some discussion with Dr. Miller on long-lived queens. He wants queens four or five years old to breed from. If they are good breeders in the spring at that age, their offspring also are long-lived, and give the most honey. He says:—"The life of a worker in the busy season is estimated at 42 days. What advantage will there be in having it extended to 45? If a bee commences to store when it is 16 days old, then the bee that lives 42 days will have 27 storing days. If it has three more storing days, then it will store 11 per cent more. Quite an item. If its life should be lengthened a week then it would have a fourth more than the usual number of storing days.

QUESTIONS.

64.—What way do you feed your bees in winter?

65.—Have you tried to grow yellow or white box trees, and with what result? What plan of planting do you adopt?

M. A. DOUST.

63.—Re the subject of boring holes in the thick top bar for winter preparation. I fail to see the necessity for it. It certainly would tend to weaken the frames and when they are filled with honey it needs a strong top bar to hold it, but if such a thing is necessary, I would prefer to make small openings through the combs.

GEO. GASSON.

64.—I never hardly feed for winter. I look out and leave sufficient sealed stores. If by chance I do have to feed I give a sealed comb if I have to spare, or a comb of syrup hung next to the cluster, or I put on an half-depth with mat between, turn up corner of mat, place in half depth common butter boat filled with syrup with a handful of grass in.

E. M. KENDALL.

64.—Leave them severely alone. To be able safely to do this it is necessary to find the amount of honey a hive of bees requires during the months of winter, and having arrived at a fair estimate, when closing down hives for winter, take all empty combs out of the brood chambers and place them in the supers, replacing empty comb space with full ones in the brood chamber. This will check the queen from laying when she should be recuperating her strength for the following season. Twenty-five to 30lbs per hive is more than sufficient for this locality.

A. A. ROBERTS.

64.—I prefer to have full combs of honey if possible, and it is always well to have a few put by in case of an emergency. If the combs are not procurable, I get a flat dish, about 3in. deep, put on an empty half super, and place the dish in it; fill with honey and place a piece of cheese cloth over the honey. One feed by this plan is usually enough. If you have to purchase honey, and you do not know where it comes from, boil it (but do not burn it) before feeding.

65.—I have not tried to grow white or yellow box, and I think, when it is necessary to do it, it would be better to take up thy bed and walk to where it grows without planting.

JOHN HAYWOOD.

64.—The surroundings of this locality, being one of the finest in the world for bees, on account of the numerous eucalyptus flora, of which some species seem to be seen any time, also other shrubs in abundance—this being the case, I have never had occasion to feed bees, but the following plan I tried once seems far the best

Get the food ready in a vessel the depth of a frame—Langstroth (a kerosene can cut sideways is a good thing), and immerse the frame *very slowly*. The cells will then fill up. Place it in any part of the hive you like. No need to waste money in other feeders, which are all made for sale more than utility. The frame should be immersed the same as if placing it in a hive. The food should be warm.

65.—White box and yellow box being in abundance, I have never entertained the idea of growing them. Our study is how to get rid of them when they are grown from farming lands (except for timber.)

JOHN GALE.

64.—In all the years (nearly 40), that I have had the management of bees, I have never once had to feed them through the winter. I always see to it that my stocks have an ample winter supply of their natural food in their own combs. I went into last winter with 23 stocks, leaving them more honey than I ought to have done. I came out in the spring with 23 stocks and amongst them they had fully 8 or 10 cwt. of honey in their combs unconsumed. Notwithstanding, the total absence of nectar in the few blossoms of last season resulted in my stocks losing heart, and after consuming their honey supply many of them died, because they had no means of gratifying their instincts, and others migrated. I have now only two stocks, but they are strong in winter stores.

65.—No, I have no occasion. All around me red and yellow box abounds, as also other varieties of eucalyptus. They are rather slow in attaining maturity, so far as my observation goes, and it would be many years before a return would be realised for the enterprise of raising these valuable honey bearing trees.

A. J. GRACE.

64.—The question this month is a most important one to the majority of beekeepers, but thanks to a good flow, I have no need to feed my bees. The plan I adopt all through the honey season, is, "never rob the brood chamber." I leave that part entirely to the bees, and I think if that is done, no matter how bad the honey flow, the bees will never require feeding in the winter. Personally I am strongly in favour of inside feeding.

65.—This question concerns beekeepers who live a long way from where the box grows in its wild state and not those who are situated as I am. Here the box is indigenous to the soil, it requires no planting. In some parts however, we have planted a few around dams and tanks to act as a shade for sheep watering, and they seem to thrive well without any care. The only plan we adopt is to trench about four feet, manure the ground a little and place trees in. We never give them any further attention and they grow well. They are a good honey tree, and the bees work on them in preference to garden flowers, lucerne, &c.

C. U. T. BURKE.

64.—I do not feed during the winter, always leaving enough and to spare of honey frames to carry the bees over the winter, well into the spring. If I was feeding it would be with the Gray feeder and pure honey, placed in front of the entrance in the evening.

65.—No need to try to grow yellow or white box round here at present, as there are plenty, but I hardly think it would pay. It is like the saying you plant pears for your heirs, it would be the same with yellow and white box. If you plant them it would be for those that come after you, who it would benefit. It would take 10 years from the time a yellow box sucker or seedling comes up before it blossoms. The same time for a white box. I know this from experience, having watched them grow from year to year. But what about the white or manna gum? The honey from this tree is equal to white box, if not superior, though the yellow box is far above any tree for honey, quality, and flavour. I defy any honey to equal it in Australia. The white gum will bloom 7 years from the time the seedling is above ground.

J. L. SCHOMBERG.

64.—Feeding bees in this country I should calculate as rather a folly. Nature provides bees with instinct to provide for bad weather, and the beekeeper holds bad judgment when he takes all their provisions away, and has to make it good again by feeding. If honey was bringing 6d. or 8d. per lb. you could understand robbing out and giving artificial food to the bees, but at the price of honey now it is better to have it in the boxes. I fell into error this season, or else nature and I had a misunderstanding. I was viewing the trees at the beginning of March, and I fully expected to see them out about the middle of April, so robbed all my bees out close by the end of March, and the yellow jacket only just starting to bud; so by this bad management on my side I have had to do something in the way of feeding in this way:—About two or three o'clock of a warm day I mix up a couple of gallons of honey and water, place it in a shallow vessel; I then put a bag in to keep the bees from drowning, and in about an hour and a half all the liquor will be sucked up, and the whole apiary has a lively hand in it at once.

65.—To grow trees of this kind I should guess would be providing for the next generation. If an apiarian wants to provide for his children, grow yellow box by all means. I hold with cultivation if it is to a man's own benefit, having for his apiary a four mile area; then I should advise him to cultivate as much lemon, honeysuckle, narcissus, jonquils, dahlias, hyacinths, and various other bulbs, together with as much mignonette as possible. Here is another more profitable crop for honey and fodder—red and white clover, rye, lucerne, buckwheat and maize. These are the most profitable in my

part. Within an area of four miles there are nearly 1,000 colonies—nice room for about 200. Imagine a man with sixty hives cultivating.

QUESTION NEXT MONTH.

66.—Do you think it unsafe to get queens from a district known to have foul brood, that is, can it be spread through the queen?

67.—Will yellow box thrive in the coastal districts, and if so ought not beekeepers to advocate their being planted for Municipal, Public School or other purposes?

A SUGGESTION FOR THE CONVENTION.

H. H. DAVEY, VICTORIA.

I have this suggestion to make, which I would be glad to see brought forward at your meetings, and also worked out in your *Bee Bulletin*, for this question seems much misunderstood. The suggestion is this:—

"That all beekeepers (N.S.W. and Victorian) unite as one in making the world's market for our own produce. It can be made; and 'unity is strength.' And further, it is most important that we give due prominence to its Eucalyptus qualities (namely, those flavours given by Eucalyptus trees.) Advertise it! spread it abroad as the best of honies. Given a tree, then all its products (honey & oil) partake of that tree to an extent. To American honey its flavours; to English its want of flavour; to Australian its characteristic flavour and medicinal quality."

That is my suggestion.

No honey has such individual qualities as the Australian; The English people know that it must be of eucalyptus quality, because from the eucalyptus trees of Australia, and they reason truly. Then let eucalyptus make our market. Its advantage is that it cannot be obtained elsewhere. Give it its name, and then I believe our best forest honies would be sought before all others because of their inherent value. Insipid white honey would give place to quality of flavour, and even our strongest honies might be best because of a stronger

medicinal value, and whether or not, eucalyptus is our opportunity, our good fortune rather than misfortune. Most people would sooner have a characteristic flavour than the English no flavour, only try them and I am sure the medicinal combined with the *delicious* will gain the day. As regards the flavour itself, is it not a eucalyptus flavour? It is a eucalyptus *tree* flavour, if not a eucalyptus *oil* flavour. All honies have different flavours according to the different trees derived from. (a) Clover gives clover honey. (b) Basswood gives basswood honey. (c) Does not horehound give a peculiar horehound honey? (d) Eucalyptus, does it not give a peculiar and pleasant eucalyptus honey? It has a flavour and the tree gives that flavour. Then my contention is, why not make a business of it? If a fact, why try to hide it? Our best plan is to use the fact and spread it, for to cry down its chief quality, its healthy characteristic, is dead against our own interests. Further, in April *Bulletin* (page 3) Loyalstone says "Horehound, a good medicinal herb, gives a peculiarly flavoured honey, light in colour and much liked." That is just the case with eucalyptus, (to paraphrase) "Eucalyptus a fine medicinal tree, gives a pleasant and peculiarly flavoured honey, light in color and much liked," liked in spite of its peculiar flavour. Now all this (in herb or tree) goes to prove that bees do not separate flavour, which are from the essential essence belonging to the herb or tree, and therefore the peculiar flavour from horehound would be from the medicinal nature of the herb, and so with eucalyptus—the flavours are from the medicinal nature, from the strength and quality of the trees. From some eucalyptus trees it is so diffused and mild as to be unnoticeable though giving it an unconscious pleasantness. From other trees it is more concentrated and noticeable, and from some few eucalyptus trees it is so strong as to be almost unpleasant. Different eucalyptus flavours from different eucalyptus trees. So

these flavours exist, call them eucalyptus or what you please, and I hold it is our opportunity. Baron Von Mueller lately stated that eucalyptus would be the making of our export trade rather than its undoing. Also H. N. Pearson, Government Analysing Chemist, in a conversation with me said, "I think you beekeepers are making a mistake in denying this alleged eucalyptus flavour, why not make a business of it?" I may have repeated myself, but it is to give force to my firm convictions.

HOW TO MAKE A START IN BEES.

BY LOYALSTONE (Continued.)

IX. WINTERING BEES, CONTINUED.—In some parts of New South Wales it is not necessary to make the bees snug and warm for the winter, as they work and breed in those parts all through the year, while in other parts it would be wise to use what is termed chaff hives. That is, have a box to fit over the hive, leaving about 1½ inch space all round the hive and top, and filling in the space with nice clean wheaten chaff or as some term them 'cavings,' you still leave the entrance open. This outside covering of the box can be made of any kind of timber. Packing cases would be useful for the purpose, and cheap. Should you not use chaff hives, and be in a locality where there is snow and heavy frost through the winter, you may paint the body of the hive, but do not paint either the top or the bottom, if you did the moisture would have no outlet and collect on the underpart of the lid, also on the bottom board and when spring came on you would find your bees suffering from dysentery and paralysis, but, by not painting cover and bottom board and having a mat of roofing felt over the frames and a piece of galvanised iron on top of the cover, slanting so as to let the water run off, your bees will remain healthy and will be strong when the spring comes on. I use the galvanised iron cover winter and summer and screw one end of it on to a 4 x 2 piece of hardwood, and in the heat of last summer standing in the glaring sun when it was 115° in the shade, I never had a comb melt down, by having it raised two inches above the cover. There is a constant draft which keeps the hive cool. If you don't care about having top and bottom board unpainted, you might give it a coat of gas tar which does not block the pores of the wood to any extent, and preserves the wood just as well as paint. The bees have no objection to tar as I have seen them on newly tarred bridges in swarms collecting propolis I presume, and it

ought to be all right for that purpose. It is not wise to open the hives during the winter months unless you think there is something amiss with one of them. If you leave them plenty of honey and enough bees to cover six frames, they will get along all serene till the spring. You will notice when winter is drawing near the bees prepare to make their home secure by blocking up all little crevices and gumming the mat down all along the edges, and it stands to reason if you take the cover and mat off the hive during the winter, you allow the cold air to enter which the bees took so much trouble to guard against. Many beekeepers are under the impression that you have to leave sufficient honey in the hives for the bees during the winter, but it is not the winter you want the honey for, but the early spring when the queens are breeding and young bees are hatching. That is the time you will notice the bees emptying the honey frames. Bees eat very little honey in the cold months. I would venture to say that 7 lbs of honey would carry the strongest swarm you have through the coldest winter, but when spring came on you would have to give them a good supply. Avoid feeding bees, if possible, never stint them with honey for the sake of a good yield to blow about. Leave them more than enough, and you will get all the more in the following season. Besides, if you follow the above directions your loss for the winter will be nil.

X. ROBBER BEES.—This is a thing that causes a lot of annoyance to new beginners, and is caused by letting the bees have access to the honey late in the season or early in the spring. If you are careless with your extracting or honey strainers, and allow bits of honey-comb to lie about where the bees have licked it up, and there being very little blossom in the bush, they will then try and enter the hives of their neighbours, and if by chance they get a start you will soon have cause to remember it. Nothing makes bees so crazy as robbing. They all seem to be on the warpath, and sting everything and everybody passing within 60 or 70 yards of the hives. You will easily find out the hives the robbers have got at by the number of bees on the alighting board fighting and tumbling about. And another good sign is, any day you notice the bees particularly cross, go and have a look at your hives and you will soon find out that robbers are at work. If left alone they get so bold as to tackle and clean out the weakest hives, leaving them to starve, and then create ructions among some of the stronger hives. The best cure of all is to give your bees no chance to start robbing. Do not do any open air feeding. If you have to feed give it to the colonies early in the morning in a Gray feeder, which allows only the bees in the hive to which it is attached to feed from it. Outsiders have no show only by entering the hive to get to it. Towards the winter you want to contract all your

entrances, leaving an entrance of about $1\frac{1}{2}$ to 2 inches, and if they persist in robbing and are very bad you will have to close up the entrance of the hive being robbed altogether for 48 hours, or take the hive from which the robbers came and place it on a different stand, which will disconcert them. By putting half a handful of flour and blocking entrance of hive robbed with it will prevent robbing to a certain extent and will also show you plainly from which hive the robbers came by watching other hives and noticing any floury bee going in. Flower of sulphur is more effective than flour, using it in the same way. Diluted sulphuric or carbolic acid sprayed slightly on entrance of hive being robbed is another good cure, the robbers not caring about the smell of it. Another plan which is very successful is simply placing a stick (flat) on the alighting board close to the entrance, so that the bees will have to climb over it to get at the entrance. The one I have been most successful with is getting a lot of grass, half dry is best, and pile it up in front of the entrance and sprinkle it with water. The robbers will not go in the entrance with this obstruction placed in front of it, and it will not disturb the hive to which it is placed to any extent, and after two or three days you can remove it when all signs of robbing have ceased. There is no apiary where there is not some robbing going on one time or another, caused by opening hives late in the season and allowing other bees to settle in the hive and get a taste of honey, of which he will at once inform the inmates of his hive by the smell of honey on him, and when he leaves the hive he is followed by a dozen or so of his companions and if the hive is closed up from which he got the honey, they will hover round and ten to one but they will get into some other hive carelessly guarded, and then the fun begins.

(To be continued.)

A.C., Spring Vale, June 8th—Just a few lines to let you know I am alive and have had a very poor honey flow this season this year so far but did very well in the spring. I got a little over 6 tons from 100 colonies in about 8 weeks and increased to 170. Every prospects of a good season next.

G.W.H., Wallagoot, Bega, June 3—I find the A.B.B. a great benefit to me—an amateur at the business. We have had a good time with the bees lately, a push along for winter. I notice here that the boxes are thick with buds, and have been so for a month. Could you kindly say whether the frost or cold weather will keep them back.

We should not think so if not too severe.

A WILD BEE'S NEST.

I suppose most, if not all, the readers of the *People's Friend* know by sight the common bumble-bee or foggy toddler, which is to be met with everywhere in the country during summer where wild flowers grow—I mean the black one with white and yellow stripes on its body, which makes its nest beneath the ground in banks and other places. Not the one with the yellow body, which makes its nest on the open ground in tufts of grass and moss, and is, I think, the real foggy toddler. One day in spring as I was taking a walk at the side of a brook, my attention was attracted by a bee alighting among the grass beside me. I examined the place, and found it had disappeared into a small hole, which I knew was the entrance to its nest or byke. I resolved to take the nest, but decided to wait for some time before doing so, till some of the young bees were hatched. I went back some time afterwards, taking with me a trowel to dig away the earth, and a box to put the nest in. When I arrived at the place I took a straw and pushed it into the hole as far as it would go, to serve as a guide to the nest. I then began to dig away the earth with the trowel, following the straw, when some of the bees arrived seeking entrance and finding it closed up, they flew about the place for some time, seeming very angry at my interference with their place of abode. They did not attempt to sting me, however, and after I threw some water on them with a piece of broom bush, they flew away again. I commenced to dig again, and soon arrived at the nest, which was built in a rats hole which had been enlarged by the bees to suit their requirements. In size and appearance it closely resembled the nest of the common field mouse, being covered with withered grass, and a small hole in the side near the top for the bees to go in at. I waited until it grew dark, when all the bees returned and entered the nest. When they were all settled and quiet, I inserted the

trowel gently beneath the nest. Instantly there was a sharp buzzing sound, and some of the bees came hastily out to see what was the cause of the disturbance to their dwelling. A making an examination they entered the nest again. After waiting a few minutes I lifted the trowel with the nest on it, and quickly placed it in the box and closed the lid. I carried the box home with me, and set it in the garden, where the bees continued to work as before; but a few of them went back to where the nest was first. I gave them boiled sugar in the lid of an old mustard tin. They seemed to be very fond of it, always taking some when they came in from the fields, as if they had not been very successful in their search for honey, and were hungry after their long flight. One day as I was watching one of the bees sipping the sugar, I saw that there was some little yellow insects like very small spiders adhering to its body, which seemed to annoy it very much. I took a straw and removed them, the bee not seeming to mind being touched. After this bee had entered the nest another one came out carrying a yellowish white worm, something like the larvæ of a blow fly a few days old. It carried it to the melted sugar, and dropped it amongst it, and then re-entered the nest. I thought I would have a look at the inside of the nest, so I took my knife and scraped aside the withered grass on the top of the nest, and found beneath that an inner covering of brown wax-like substance, which, I think, had been placed there by the bees to keep out any rain which might happen to penetrate through the ground above the nest. It was full of comb, the cells being shaped like a thimble. There was also a number of bees, among which I easily recognised the queen by a round black spot on the shoulders without any hair on it. She was also larger than the rest of the bees. I saw a number of worms the same kind as the one the bee had put among the sugar, and discovered that they were eating the walls of the cells after the young bees had left them. I removed as many of them as I could

see. Some of the cells contained honey and were all closed up except a small hole in the top. I suppose the bees had left the hole for the convenience of getting a sip when hungry. I saw a cell closed up altogether and on opening it I found five worms all dead. Whether the bees had put them in alive and then killed them by suffocation, or if they had been dead, and the bees had sealed them up to prevent them from decomposing and spoiling the air in the nest, I do not know. I put the lid on the box, and waited for some time to see what the bees would do. On removing it I found them hard at work repairing the damage I had done; they had pulled the edges of the inmost covering together, and were spreading the withered grass, which I had removed to one side, over it. When I let the light in upon them, they stopped working, and some of them turned on their backs ready to defend themselves if attacked. I put some withered grass of a lighter colour than that in the nest in the box, and closed the lid and left them. On examination a few days afterwards, I found they had carried it to the top of the nest and mixed it with the rest of the grass there. I intended to keep them all winter to see if by feeding them I could get them to remain in the nest till spring. But, one day after I had been looking at them, a hive of domestic bees not far from them began to rob them, attracted I suppose, by the smell of honey. They killed a great many of the bees, and though I removed them beyond their reach, the wasps continued what the domestic bees began, till there was nothing left but empty cells and dead bees. There were only two bees alive when I shook the nest out of the box, and these, strange to say, were almost white. They reminded me of ghosts crawling about among the ruins of their former abode. Thus ended my first experience of keeping foggy toddlers, much to my regret, as I have never had the opportunity of doing so again.—*English Faper.*

A. B. M'G., Boggabri, June 9th.—Bee news rather scarce. Had a fair summer, and bees in good order for winter. Wishing your journal success.

A. J. B., Parkville, June 11th.—My bees are wintering splendidly, with no chance of losses so far. The ironbark, gum and yellow box are commencing to bloom, and with fine warm days the steady flow I am having will increase nicely, and I require it, as my last crop, of nearly two tons is almost all sold. Have no trouble to sell.

In *American Bee Journal* the question is put:—"What honey-producing plant would you recommend beekeepers to endeavour to spread? Please name them in the order of their value, as you believe." Of 24 replies 8 gave sweet clover first, 4 alsike or crimson clover, 3 white clover, 2 basswood, 1 alfalfa, the others were recommendations to study what suited the locality or had no faith in special planting.

A Mr. Thielman, in the *American Bee Journal*, gives an experience with painted and unpainted hives. He says that the hives should be planed on the inside, not outside. Twenty-four years ago I had 12 hives made and painted with linseed oil and white lead. For the hives I paid in cash 48 dollars. They were made of clear, white pine lumber, one inch thick after it was planed. At the same time I had 12 hives, same size, made of rough lumber, not painted, for which I paid 24 dollars, and to-day one lot is about as good as the other. Now, just count the difference between 24 and 48 dollars, and compound interest for 24 years, and see what a nice little sum of money I would have saved with all unpainted hives. This roughness on the outside not only helps to preserve the wood from the weather, warping and cracking, but creates very little reflection from the sun in hot weather, which all the veterans in bee culture know unpainted hives do.

CAPPINGS.

(From American and other Bee Journals.)

John H. Mertin says, few men are able to distinguish the different flavours of honey, after sampling a score of cans.

The foundation made by the new continuous Weed process *Gleanings* says is very much tougher than by the old process.

Dr. Miller says, the important thing now is to tell what use can be made of sweet clover as a forage plant. The time for discussing its value as a honey producing plant is past.

C. H. Clayton says, if every ounce of honey in the United States was used as food there would be but $\frac{1}{10}$ ths of a pound apiece, there being 49,000,000 lbs raised, and the population 70,000,000.

The American beekeepers are petitioning the Secretary of Agriculture to take steps to introduce the "*Apis Dorsata*" or giant bee of India into the United States.

The Hon. R. L. Taylor says,—Lucerne honey raised to a temperature of 180° becomes much darker, than would willow-herb honey, also that heat is conveyed more intensely by an earthenware vessel than in a burnished metal vessel.

Mr. Frank M'Nay gives an improved use of the drone guard. By keeping it permanently on the hive and with a wooden slide at bottom, that he can open or close—leaving open when at home or closing when away from the apiary, gives practical control of swarming, and does not discontent the bees as much as when only put on occasionally.

In reply to a question by C. F. Hochstein as to whether some chemical could not be found that would prevent granulation, the editor of *Gleanings* says:—Until we can find some chemical, I am of the opinion that the most satisfactory method of preventing granulation is in the employment of heat; and even if a chemical is discovered, it may not be any cheaper, nor as cheap.

Sweet clover requires a thoroughly drained or underdrained soil. It will not grow with its feet in water. It will not succeed in a soil that is undersoaked.

Mr. Wm. S. Barclay in *American Bee Journal* says:—As to feeding to increase brood-rearing, I have almost concluded that no matter how much honey may be in the hive, if we place feeding honey or sugar syrup in the proper position in the brood-nest it will be greedily taken by the bees, and thus be promotive of increased brood-rearing. By the proper position I mean by placing it outside the division-board. I like this much better than feeding lightly every day above the brood-nest; it accomplishes the same purpose, and saves much time and labour.

A Mr. Freeborn in 1868:—At that time smokers had not been much used, if invented, and, as a substitute, he had rags wound round sticks and set slowly burning, to produce smoke to control the bees where desired. He had a honey box about five inches square and a foot long, open at one end. There was a hole in the other end, through which he inserted his thumb to grasp it by. When he discovered a colony start to cast a swarm he got the box, went to a cluster of bees, put a few into the box, and held it up above his head near the swarm coming out. It was amusing to see the bees pour into this box, and then see them dumped out at the hive where he wanted them.

"Oil Cans" receipt for cleaning kerosene tins, and removing the odour:—Keep the cans prepared some two or three weeks ahead of the time they will be needed. To clean, first take of the oil-faucet; punch a small hole in one corner of the can; drain out all the oil that will run; expose in the sun for a few days the caps thus drained, then use hot water and washing-powder thoroughly. Follow this by rinsing till clean, and again place in the hot sun. In a few days it will be impossible to perceive the scent of oil in

them. Cans must be left open while taking their sunbath, and the open end up to give the evaporating water a chance to escape.

Dr. Miller gives the following for prevention of swarming and dividing for increase:—As soon as the bees get fairly to work and begin to increase in number give each colony a second story, putting the hive with empty combs or foundation under the full one. Very likely the bees will work down into this lower story more or less, and at any rate the extra room will have a tendency to prevent swarming. About the time of the beginning of the main harvest, lift off the upper story and put it on a new stand, leaving the queen on the old stand in the partially empty hive. This makes your work very little, and if you do nothing more, each hive put on a new stand will rear its own queen, but it will be a great help if you can give to each a cell ready to hatch.

Geo. Tournat on uniting bees.—In the first place, my hives have loose bottom boards. I wait till the sun sets, and then go to the colony I wish to unite with, give them a little smoke, and trim off the burr-combs, if any, and scrape off everything clean preparatory to setting the other colony right on top. I then go to the other colony, give them a little smoke at the entrance, then lift the box right off the bottom board, and set it over the other box to be united with. I take my smoker and again give them some smoke at the entrance below. I find this method very simple, and have not had any trouble yet in uniting colonies. As to the queens: I unite the inferior colony with the better, and I find, as far as my experience has been, that the strange queen to that colony, is the one that is killed. If I am wrong in this, the queen not wanted can be destroyed before uniting.

B. Taylor, in *American Bee Journal* gives his plan of shipping large lots of comb honey, viz. :—For shipping in 200 lb lots, I make a crate of light stuff, nailed very strong, and with solid bottom

of thin stuff. On this bottom I lay evenly two inches, when packed, of clean straw; then on this several thicknesses of waste paper. Five 20lb crates are placed close together in the crate; this will leave them two inches from the end of the large crate, and this space is packed moderately solid with straw to make a cushion to receive and soften any end-jar in the cars. On these first five crates is spread one inch of fine straw, paper laid on it, and five more crates put in as before, paper laid on top, and straw laid on as thick as is possible, so the cover can be nailed over all. I use pressure in nailing the cover on, as the fruit men do in packing apples, for we must prevent all jumping of the honey in the large crate. I must not forget to say that the large crate is just wide enough, so the cases will fit snugly end-wise, and no packing is used in this part. The glassed ends of the crates are all placed on one side, and the slats that make the large crates are far enough apart so the honey is plainly to be seen. The top strip that is used for the sides of the crate is long enough to project 8 inches at both ends, for the railroad men to lift it by. The crate is now plainly marked with directions to set it lengthwise in the car, and is always sent by freight. This crate is too large for one man to handle, and it is already for two to carry conveniently without rolling. I have never lost a nickle from breakage in them.

Mr. H. G. Quirin says:—Many object to the use of the nursery on account of not being able to control the temperature or the amount of fire required to maintain the proper heat. The nursery which I use does not require more than five minutes of time a week. The nursery is simply a live incubator I had built to order for hatching chickens; but it was built with the view of hatching queens also. The inside dimensions are 48x36x12 inches. It has an automatic heat regulator attached, by which the temperature can be adjusted to any desired degree; and, when once adjusted

it needs no further attention whatever for the entire season. Of course, the nursery is not an absolute necessity, but is such a convenience and saving of queens that, when you have once availed yourself of its use, and have learned to operate it thoroughly, you will never do without it. Now, I know that there are queen breeders, who once used the queen nursery, but who do not now use it. If I am not mistaken, some of these parties complain about controlling the temperature, and perhaps the most of them have given up its use on this account; but this is very easily overcome by means of a pair of thermostatic bars to control the heat, which can be purchased of almost any incubator manufacturer. The advantages of a nursery are many. As fast as queen cells are sealed they can be placed therein, and be perfectly safe—no danger of the bees tearing them down, as they will sometimes do when you have fifty or more cells in a colony; or if a virgin queen gets into the hive you will lose all your cells. Just imagine losing all of your sealed cells, with dozens of orders coming in daily! Then, too, you are obliged at times to take care of cells when the weather is too cool or otherwise unpleasant to disturb the bees taking care of the cells.

J. S. L., Grassdale, Warri, May 23.—Wishing the *A. B. B.* every success. I find it getting more interesting each number, and I wish it was a weekly instead of monthly.

J. N., Dumaresq, April 1st.—For myself, I may say that I would give up every other paper rather than the *Bee Bulletin*. I think that it, by the many most useful hints which are always appearing, adds much to the income of its subscribers. I wish you all the success you deserve.

W. W., Yass, Ap. 26th.—My bees I am sorry to say have not gathered any honey as we had a rather severe drought. However, I lost none of the hives and

so hope to make a new start this year as things look more promising. Bee moth were rather troublesome about latter end of year, but by close attention I have kept them under. Hope you are doing well with your bees and also paper, which I read very carefully.

C.B., Benalla, Vic., May 5th.—A few lines to let you know that I like your journal very much. The state of the honey harvest about here this year was very bad. I wintered twelve colonies, which in spring increased to 20, but the continued dearth of honey reduced them again to 14 colonies, and the season closed with a credit of 22lbs per hive. In March I had a good flow from stringy bark, but the bees were too weak to take the best advantage of it.

H. J. G., St. Peters, June 1st.—A friend of mine preserved some grapes in a glass jar, according to the honey pamphlet and they got so large that they filled the jar up to the top, and the honey had to get outside, in spite of the covers being wired on. I see by the journal that currants are very nice preserved in honey, but if they are going to act like the grapes I cannot try them until I know more about them. I am pleased to tell you that I am rid of foul brood at last, thanks to yourself and Mr McEvoy.

The *Western Post* (Mudgee) speaking of the Wellington Show says:—The Wellington beekeepers, in a short space of time, have done wonders. They are favoured with a good district, which means a lot. We are sorry that Mudgee cannot boast of such an Association. Let the members be united, and then success will follow. There are some unprincipled bee men to deal with. We have known cases where a beekeeper has deliberately taken away another's customers by offering honey at a less rate. Such tactics are despicable. What we want is a standard selling price for our beautiful honey, and united action is the only way by which it can be brought about.

J.K., Milson's Point, North Sydney, June 1st.—I feel greatly interested in all bee matter and bee pastorage, and would like all bee men, which includes yourself of course, to prosper and go ahead. I like your journal very much, and I take *Gleanings*, which is got up in good style. Still Mr. Root harps quite too much on his own household matters, and even on religious matters as well. 'Tis possible to have too much of even a good thing. I consider yours a more practical publication, as you keep to the bee subject and its necessary surroundings.

M. A. D., Balmoral, May 15.—Having been rather more successful in the apiary this year, than previously, perhaps a short account of my experience will be acceptable to your readers. At the end of last summer I had twenty colonies, but owing to the severe winter I lost some and united others, so that in the spring I only had twelve colonies, ten of which are Italians and two are hybrids. Like many other beekeepers, I had no swarms, and although we had such hot and dry weather in the early part of the summer, the yield of honey has exceeded my expectation. I have extracted 1000 lbs during the season and the bees are still bringing honey in. The chief honey flow in this district comes in after Christmas, and this year the bloodwood trees flowered profusely for several weeks, and the bees gathered large quantities of honey from that source.

Boomerang, Wattle Flat, June 1st,—Seeing very little bee news in the *Bulletin* from this corner of New South Wales, I thought I would try and rake up some. The past season has been a disastrous one for beekeepers here, having very little rain last winter and a very dry summer. Very few trees bloomed, consequently the bees had a rough time of it and had to be fed. Fortunately, however, a nice lot of trees have been in bloom this last four or five weeks, and although the weather at the present time is too cold for the bees to get out, yet I think they have gathered enough

to tide them over the winter. If we get sufficient rain this winter, it ought to be rattling good times for the bees next summer, as there is thousands of trees in bud, which ought to bloom in the spring. Some of them have been in bud for seven or eight months, so it will soon be time they furnished some food for the bees.

E. M. K., 20th May.—Our bees have done very well this season. We had a good yield in the early spring and another again during the latter portion of the summer. The honey extracted was very rich indeed and sold most readily. The bees are still very strong, and strange to say, drones are left unmolested in many hives. The pure Italian queens have left off laying, however, such is not so with her black sisters. I have studied Mr. Abram's contention as to the relative qualities of both Italian and black queens very closely for the last two seasons and must admit the superiority of the former. Much has been in your paper upon the ringbarking of our forests and in all probability much has been left unsaid, why our timber should not be so ruthlessly destroyed as at present. There are large tracts of country well timbered which should be reserved expressly for apiarists, in our coastal districts, but which being mostly alienated land, will in the course of time become divested of its valuable natural wealth, thereby checking a growing and useful industry. Your interesting paper is much appreciated here, and I hope in the future to take part in the bee discussions.

J.B., Palmers Island, April 1896,—I like to read the *A.B.B.*, so I like to pay for it also, it is well worth the money. I get a lot of information out of it, especially in the questions and answers, they are a great help to beginners. I don't pay much attention to the articles on foul brood and other diseases, as we never have anything like that up here. I gave 15s for a select tested queen and got her introduced all right to a first swarm, but of

course they only had frames with starters, so I filled her out with frames taken from different colonies and then I was satisfied. I did not want to disturb her any more for a while after I had seen she had started laying. In about three weeks or a month, I thought I would like to see my select queen, but Oh horror! instead of my nice queen I found one in her place as black as ink, and my beautiful queen gone. I was so disgusted that I pinched her black head off. I concluded that there must have been a cell in some of the combs that I was fitting her out with. What do you think Mr. Editor? I would not have taken it so bad if I had found her dead, but to think that somebody else might have my 15s queen was awful.

[Evidently the bees you gave to strengthen your queen must have killed her. Or she might have died naturally and been superseded. Possibly you gave a frame with a queen on. When taking the frames from the other hives did you look carefully to see there were no queens on either of them, and are those hives you took them from any of them queenless?

J.L.M., West Tamworth, June 1st,—A word or two about the ringbarking. I was not able to fill up the list protesting against it owing to being laid up, but I must say that the graziers clearing the forest stand in their own light, for if it was not natural for the trees to be there they would not be there. The forests are the great fertilizers of the soil, and when you take them away, you take away the fertiliser and also destroy valuable timber. Thinning the forest is very good. I will now give you a result of clearing the forests. When the timber is all cleared, the land will bear an abundance of grass for five, ten or more years, when it gradually begins to fail; why? because the fertiliser of the soil is gone, the roots of the rung trees have decayed which kept the ground loose and open; the ground now becomes solidated and the water cannot enter it, so it takes heavy droughts to crack and open the ground to let the water in, whereas before nature's forest did it, and drought will be found more disastrous to stock, as there will not be

even leaves to feed them on, and I think a greater disaster to man, as the droughts will be greater. It is a known fact that the clearing of the forests makes it far colder for winter and exceedingly hotter for summer, owing to the sun having a greater play on the bare ground. The roots of the trees draws the water from the depths of the earth, and spends it in vapour upon the earth, and they also have similar habits in drawing water from the elements above.

H.D., Melbourne, Vic., May 26th,—Please answer,—(1.) If the Victorian Association has any connection with the National Association, and what is the cost of membership of the latter. (2.) If your *Bulletin* is as much Victorian as N.S.W., that is, does it aim at being Australian, or is Australian only a name? (3.) In your sample copy (page 9 & 10), re Mr. Taylor's evidence, is it not an error in printing when it says 15 tons from 120 hives and 30 tons from 150? Would not that be too fabulous? I know a man that obtained 11 tons from 180, but never 30 from 150. Is it a fact? (a) What is the principle kind of tree around Cowra that gives such heavy yields? (b) and the kind of bees that are able for it? (c) Would 150 hives in red gum and white gum swamps (with grey gum and stringy bark at intervals), give such a yield and in Victoria? or is N.S.W. phenomenal and the land of milk and honey? Also let me know the price of volume 4, and forward it. The index you forward is good and promises something good.

[To your questions. (1) The *National Association* is the name of the N. S. Wales organisation. The subscription is 5s per annum. (2) The last Victoria Convention adopted the *A.B.B.* as its official organ. We do our utmost to represent the interests of all the colonies in it, and am not hampered by being either a Supply Dealer or a queen seller—quite independent of either. (3) Yes! Mr. Taylor is an old and skilled beekeeper, his hives are strong, and we have no doubt in the good seasons he gets that amount in his good district, but it is only every third or fourth year. Taking the years right through he does not get that amount. It is mostly from white and yellow

box. His bees are mostly Italians. Under the same conditions you might occasionally get such a return from the timbers you name. We do not know that N. S. Wales is better as a honey country than Victoria, but a greater proportion of Victoria is cultivated more than N. S. Wales, and for that reason N.S.W., having more original bush, would be better. Many thanks for the names you have sent. The prices of the bound volume is 7s 6d. Add postage 6d.

JOTTINGS.

J. D. G. CADDEN

I must shake hands with Messrs W. Shaw and Geo. Packham, for both agree with me in April issue. I have said the same things before and feared I stood alone, but now value their opinions and assistance. J.T.H. might have been more correct had he said 'their' instead of 'his' (page 22) in referring to myself, and one or two others advocating half fares for Convention. I reply that I think it is mean to ask the country to pay fares to enable us to attend our yearly meetings. I would not attend at Goulbourn in July (for it is too cold) even if I had any number of free passes, and unless something different is done in the matter of selling honey, queens, &c., for better prices, it is useless continuing to keep bees, for at present prices they certainly cannot keep us. Take the daily papers and no matter the prices of eggs, butter, cheese &c., whether scarce and high priced or plenty and low prices, honey stands at 2d to 3d and even now, after very bad seasons and scarcity, it is selling for less than any previous season and I think the cause is not far to seek. My own idea is that so called beekeepers are themselves to blame, for some seem to fear their neighbour may be more successful than themselves and so give their goods away. All I have sold this season I have had 6d per lb. retail, and do not intend to sell under, for if it is not honestly worth a fair price (and 6d is within the reach of everyone) I must turn to something more profitable, for at the prices quoted the time spent and labour and cost of hives and other necessaries can never be returned, and I

do not intend to labour and spend good money and then sell at ridiculous prices and let someone else make money out of my labour. Not if I know it! Now then someone else join my ranks. How many? When this is done and prices put up to a fair thing, no need to ask the country to pay our fares, neither Editor to ask for subs. due. We can do it and be glad.

FOUL BROOD.

JOHN DAVIES.

Sir,—If I am not trespassing on your space. Re foul brood and how to get rid of it. Three years ago I had 65 hives, and it has got me down to 16. I have tried new hives and starters and sprayed them with salicylic acid and carbolic acid, and it failed when there was little honey to be got. I have tried to cure it by feeding them with syrup and carbolic acid when they had 8 lbs of honey, and that failed. I have tried too many ways to mention. No more medicine for me, and here is the way I have put it out, in three ways in different hives. First I changed 1 or 2 in the morning, before any bees are out. I take clean hive with 2 frames with comb and 2 or 3 empty frames and a sack to put in front of clean hive. Now I take the brood frames out one by one and shake the bees on the sack and put the frames in a box close by, and a sack to cover it. When that hive is done I take the frames and burn them. In the evening I take these two frames out and shake the bees in front of the hive and then give them a frame of candy and pack the bees tight. Second, I change the hive and frames. I starve them for 48 hours in clean hive and frames with starters. When I give them freedom, I give them them 6lb of candy. After they build a few frames of comb I give them about 6 lbs of syrup. I lost three swarms by above. They were all right in 42 hours but they were dead in 48 hours.

Third: I contract the hive with division cushions. They had no honey at time. I gave one 8 lbs of syrup and the

other 10 lbs. In a month's time foul brood was put outside, and good looking brood inside. That is five months since I done the last plan. In April I put the winter suit on, and not a cell of foul brood. Foul brood has been on this district over 4 years with 13 small bee-keepers and not a one tried to cure it, but leaving the boxes in the garden, after the bees died with it. If any one succeeds in any of these plans they ought to publish it.

PRESERVATION OF COMB AND RENDERING OF WAX.

HON. R. L. TAYLOR.

Placing them in hives, over strong colonies of bees, so that the bees can have free access to them. To good colonies from one to half-a-dozen hives of empty combs may be given, care only need be taken that no more be given than the bees will visit somewhat freely. Where it can be used this is the safest and best method, for the bees not only protect them completely, but clean them to a considerable extent, so that they are put in better condition of preservation by other methods, still it has its disadvantages; the combs must be handled two or four times a season, and during the honey season if comb honey is produced they must be removed, and this is the time when they especially need protection from moths.

I have had excellent success in keeping them in close hives in the shop by laying two thicknesses of the newspaper upon a level place on the floor, setting a hive of them upon the paper, covering the hive with two thicknesses of the paper, putting another hive covered with paper on that, and so continue the operation until the pile is of the desired height, when the topmost hive is to be protected with paper and a close-fitting cover. As the combs are thus so tightly enclosed, they must be reasonably dry and put away only in a dry place. It is all-important, too, that they be put away early, at least before the millers have an opportunity to deposit their eggs in them. By this method I have kept combs the season through without the sign of a moth, while combs put up in the same room, in the same way, except that the paper was not used, required constant care to preserve them from destruction. The miller that produces the egg from which the moth emerges is furnished with a long ovipositor which she can insert in a small opening, such as she is almost sure to find somewhere between almost any two hives set one upon another. No doubt the openings are present only in a less degree where the paper is used, but for some reason they appear not to

invite the miller; it may be because there is something repulsive to her in paper, or, possibly, because the paper, extending outward from the hives all round an inch or so does not allow her to take the position she desires when she uses her ovipositor. There is one function which it seems reasonable to suppose the paper would perform, though, as yet, I have had nothing to test it, that is, in case the moth should obtain a lodgment in one hive, to impede their spread to the others. Tar paper unquestionably would be much more effective in this respect, and quite likely fully as repulsive to the egg-laying miller. It is worthy of a trial. The method here described, when the combs are reasonably clean, has proved to me on the whole the most satisfactory. Another way that is entirely effective against the moths is to hang the combs up to the light and air with a space of at least one inch between each comb and its neighbours. This answers well enough for a season or two, or even longer, when the combs have become toughened by the cocoons of many generations of brood; but if the combs are new, the light seems to have a deteriorating effect upon the wax composing them, causing them to readily crumble; besides, combs so disposed, gather dust and the webbs of other insects than the moths. For convenience in practising this plan, when I built my shop I placed the joists overhead so as to freely admit the top-bar of a Langstroth frame crosswise, then by nailing half-inch strips near the lower edge of neighboring joists, each space is made to conveniently accommodate a tier of combs, their arms resting upon the half-inch strips.—*American Bee Journal*.

N. B. K. A.

A meeting of the committee of the above was held at Messrs Hebblewhite's on Thursday Afternoon, May 28. Present Rev. J. Ayling (President). Messrs Taylor, Abram, Bloxham, Wilshire, Gale, Trahair, Tipper and H. R. Whittell (hon. sec.). They first proceeded to the office of the Minister for Mines and Agriculture. Here they were joined by Messrs Gillies, Howarth, Thomas, and McGowen, Ms.L.A. Owing to the illness of his daughter, the Hon. Sydney Smith, the Minister for Mines and Agriculture was unavoidably absent, but his place was occupied by the Under-Secretary, Mr. M'Lachlan.

Mr. Gillies introduced the deputation, and explained its object. A conference of beekeepers was to be held at Goul-

burn, on July 1, 2, and 3; that the gentlemen present represented that large and increasingly thriving industry, and that the Minister would be fully justified in granting railway passes as on previous occasions.

Mr. Whittell said on the last occasion 117 passes were issued, but owing to the past season being a bad one, not so many would be required on this occasion.

The Rev. Mr. Ayling and Mr. Abrams also spoke.

Mr. Whittell asked that Mr. Guthrie, chemist of the Department, who had been allowed to attend the previous Conferences, should be permitted to attend at this.

Mr. M'Lachlan said all he could promise was that the appeal of the deputation should be conveyed to Mr. Smith on the morrow, and the answer would be communicated to Mr. Whittell, as soon as possible.

The committee now adjourned to the office of Mr. Whittell, in Hunter Street.

The minutes of two previous meetings was read and confirmed.

A large amount of correspondence, including the many petitions against ring-barking from all parts of the colony, with some 2000 signatures, were laid on the table by Mr. Whittell, including also offers of papers to be read by Mr. Shaw, of Mudgee, Mr. Patten, of Bolwarra, and Mr. Tipper.

The action of the sub-committee in sending £5 to Mr. Taylor, to enable him to lodge an appeal against the decision of the Bathurst Land Court, was confirmed, on the motion of Mr. Whittell, seconded by Mr. G. Gordon.

The petition was read through and some slight alterations made, it being thought as the case was *sub judice*, it would not be well to refer too pointedly to the Bathurst case.

It was arranged that the matter of hotel accommodation at Goulbourn, be left to Messrs Whittell and Trahair.

The meeting adjourned to Friday evening, June 5th.

The committee met at Parliament House in the evening, but were informed owing to pressing matters in the House, the Minister could not receive them and the petition re ringbarking that evening. Mr. Whittell, however, with the assistance of Messrs F. Farnell, Price, and Gillies, Ms.P, induced him to arrange to meet them next day (Friday), at the Lands Office, when the following were present:—Messrs Price, Howarth, and Dacey, Ms.P, and Messrs Whittell, Gale, Tipper, Roberts, J. E. Taylor, Seabrook, and Trahair.

Mr. Price read the petition which had been prepared, and which with slight alterations, was the same as printed in our last issue. He appealed eloquently on its behalf, and said though the Land Board might give its instructions, there was no machinery existing to cause its provisions to be enforced.

Mr. Carruthers, in reply, said the timber on the coast had been destroyed chiefly for fuel, but in the interior, and about Bathurst, Cowra, &c., a great deal of the land was in private hands, and the Government has no jurisdiction over it. On his recent visit to these districts he urged on the owners the folly of destroying their timber without even leaving sufficient shelter for stock. He would rather pay 30 per cent more for land with timber left on it than for land that was wantonly injured by the destruction of the timber on it. He gave an instance of some land which had not been cleared, fetching £40 an acre, while some improved land close by only fetched £20 an acre. The reason being that a neighbouring farmer thought that the preservation of that belt of timber would be a shelter to his stock. He had always set his face against wanton destruction of timber. With regard to the conditions as to ringbarking, there was a case now before the Appeal Court on this very point, and when it was decided he would look very carefully into the matter, and do what he could to meet the views of the deputation, subject to not injuring larger industries. Several of the native birds were honey feeding,

and the destruction of honey trees meant their destruction, and as they were insectivorous also probably some of our insect plagues were due to this.

Mr. Price informed the Minister in the absence of Mr. Sydney Smith, that they had taken a number of samples of honey purchased in Sydney, and found 80 per cent of them to be adulterated. He hoped Mr. Carruthers would bring the matter before the Cabinet with a view to having the practice stopped.

Mr. Carruthers promised to see to it.

The adjourned meeting of committee took place at Messrs Hebblewhite's on Friday evening. Present:—Messrs A. Gale (in the chair) and G. Bloxham (sec. pro tem), Trahair, George Gordon, J. E. Taylor and E. Tipper.

The minutes of previous meeting were read and confirmed.

Mr. Bloxham apologised for the unavoidable absence of Mr. Whittell, also for Mr. Wilshire.

A number of communications were received from gentlemen announcing their intention to attend the Conference and giving suggestions.

Mr. H. Nancarrow of Wellington wrote that the following gentlemen would represent the Wellington B. K. A.:—Messrs A. J. Murray, Nancarrow, Cureton Bros., and Matthews.

It was resolved that the Secretary & Treasurer, Messrs Whittell and Trahair, make all necessary hotel arrangements, same duty they undertook last year at Bathurst.

Mr. Tipper stated Mr. Rein of the Hawkesbury Agricultural College was prepared to read a paper.

Mr. Taylor offered to read a paper on "Ringbarking."

The following papers were then agreed on to be read:—

1. Mr. A. Gale, "The Influence of Bees on Crops."

2. Mr. Abrams, "Notes and Observations on Bee Culture."

3. Mr. J. E. Taylor, "Ringbarking."

4. Mr. Guthrie.

5. Mr. Patten, "Parthenogenesis"

6. Mr. Tipper, "Our Home Market and Adulteration."

7. Mr. Shaw, "Honey Producing Plants."

8. Mr. Rien,

The following committee were, on the motion of Mr. Trahair, seconded by Mr. Gordon, appointed to supervise the applications for passes:—Messrs Gale, Whittell, Trahair, Bloxham and Abram, three to form a quorum.

On the motion of Mr. Gordon, seconded by Mr. Taylor, the same committee was appointed to draw up the Conference programme.

On the motion of Mr. Trahair, seconded by Mr. Tipper it was resolved that no paper should exceed 15 minutes in reading; discussion not to exceed an hour; no speaker to speak more than five minutes, and the opener to have five minutes for reply. The evenings to be devoted to questions.

THE APPEAL CASE.

The above came off before the Land Appeal Court, at Darlinghurst on, Tuesday, June 8th, the Board consisting of Messrs Oliver, Brandice and Freeman.

J. E. Taylor appealed against the granting of permission to James Marsden to ringbark trees on his annual leases, eight in number, in the Bathurst land district.

Mr. Crick appeared on behalf of Mr. Taylor, and the N. B. K. Association.

Mr. Marsden appeared for himself. The following members of the N. B. K. A. were present:—Messrs Gale, Whittell, Trahair, Bloxham, Roberts, Seabrook, J. E. Taylor, and E. Tipper.

The evidence given at the Bathurst Land Court was read by the Clerk of the Court.

Mr. Crick said his appeal was made, not so much in the interest of Mr. Taylor, as in the interest of the public at large, for the preservation of the timber. He admitted that Mr. Taylor had not a right to appeal, but the Court would have power of its own motion to so direct

that the destruction of the trees should not be tolerated. It was a matter of great importance, and Mr. Taylor was deserving of the thanks of the public for taking such a step to prevent the wholesale destruction of our forests. The yield of honey from these trees would be worth £2 per acre, far more value than the land would possibly be for grazing purposes, and the object of the appeal was to invite public attention, and it was in the interests of the whole community that this destruction of the timber should cease. There was no provision that the decisions of the Land Board could be properly carried out but the lessee was liable to a penalty of 1/- or more for every tree improperly ringbarked.

Mr. Taylor does not occupy the land complained of, but has a business license on Crown Lands adjoining, so the following decision was given.

As it appears to the Court that the *locus standi* of the appellant is more than questionable and as Mr. Crick, on appellant's behalf, admits so much, the Court thinks that the best course is to order the appeal to be struck out, as it appears that the appellant might be able to make such representations to the Minister as would induce him to take the necessary steps to have the case referred to the local Land Board to consider how far the public interest may be affected by granting the permit to ringbark applied for. Appeal struck out. Deposit to be refunded.

Mr. Marsden asked for his expenses. The Bench said they could give no order.

A committee meeting of the N.B.K.A. was held shortly after, at which a communication was read stating the Department of Agriculture could not grant passes this year as last. It was then resolved to wait on the Railway Commissioners. Mr. Fehon was in town. Mr. Whittell appealed on behalf of the committee for the special excursion rates issued to farmers trains which is about 1½d for first class passengers per mile, and ¾d for second class. He explained that last year we were given a number

of free passes. This year there would not be as many as the season had been a bad one for honey. The holding of the Conference would cause many to see the advantages of possibly changing their apiaries and lead to increased traffic in honey.

Mr. Gale supported Mr. Whittell's appeal.

Mr. Fehon said the most the Department could do would be to issue tickets at a single fare for the double journey available from June 29th for a fortnight after, and that the N.B.K.A. should give those applying for tickets something by which they could be indentified.

Mr. Whittell thanked Mr. Fehon on behalf of the committee, who then withdrew.

A further committee meeting was held at Mr. Whittell's rooms, at which several matters of detail were arranged, including a resolution to ask Dr. Hollis M.P. of Goulbourn, to preside at the Conference.

AN ASSOCIATION FORMED IN MOLONG.

From the Molong Express.

It is with pleasure we record the fact that a Beekeepers' Association has been successfully formed in Molong, and under auspices of the most favourable kind. A meeting having for its object the formation of such an institution was held in the local Town Hall on the night of Friday, 29th May, and though the attendance was not large those enthusiasts who were present manifested considerable interest in the proceedings. Garra was represented by Mr. L. C. Young, while the Cumnock beekeepers sent along a delegate in the person of Mr. John Marston; thus even though from merely a numerical point of view the meeting was not a big one, it certainly was representative of quite a little army of persons who are deeply interested in the honey-producing industry. Shortly after eight o'clock, the Mayor (Mr. George Packham), who is the champion apiarist of the Molong district, was voted to the chair, on the motion of the Rev. W. C. Hughes, seconded by Mr. Jas. Packham.

In his opening address the Chairman said: I am exceedingly pleased, gentlemen, to see so many here to-night, but I would still like to have seen a larger attendance. However, there is an old saying that great things sometimes have small beginnings. I hope, therefore, a great thing

will eventually develop out of the small beginning we are going to make to-night to bring about the establishment of a Beekeepers' Association in this district. (Hear, hear.) That is the purpose of this meeting. The objects of a Beekeepers' Association are numerous. It would be impossible for me or anyone here to relate half the benefits to be derived from meeting together in a fraternal body to discuss matters pertaining to the advancement of apiculture. Beekeeping is only in its infancy in the most advanced parts of the world, and in this district it is hardly born. Four or five years since if one spoke about a bar-frame hive or an extractor he would meet with a reply something like this: "I don't believe in them. My old father was one of the first beekeepers this side of the Blue Mountains, and he had none of your bar frames or extractors either, other than a sugar bag, which answered very well." Perhaps it did in his day, when the bar frame of to-day was unknown anywhere in the world. But we can rejoice in the fact that Father Langstrath, after years of study, invented what is now known as the bar-frame hive, which, with the use of the extractor, makes beekeeping not only easy, but a profitable industry—that is, in a good locality. I believe the Molong district will compare favourably with any district in the colony for the purpose of beekeeping, if perhaps we except a small area on the Turon River, where a beekeeper procured 21 tons and increased his stocks from 50 to 150 colonies in one season. Such results as this could hardly be reached in this district. As I have already stated, there are numerous advantages to be gained through combining together. I wish to enumerate some of them. In the first place, by forming ourselves into an Association and meeting together we are enabled thereby to educate one another in matters pertaining to apiculture. I am well aware that there are men keeping bees who consider themselves efficient and do not require any assistance from others, but when bottomed these people know nothing. For my own part I ought to know something, and I am always willing to assist those who have not had the same advantages as myself;—(hear, hear)—yet I still have a great deal to learn, and the more I learn the less I seem to know. Therefore, it is quite necessary for beekeepers who wish to advance to meet together for the object of exchanging ideas and thereby assisting one another very materially. We all require (that is, in a good season, not like the last two have been) vessels for our honey. The cheapest and most convenient receptacle is the kerosene tin. These tins if purchased from our grocer in town cost from sixpence to ninepence each. By getting them from Sydney by the ton they cost about 2/6 per dozen landed in Molong. Of course, it is not every bee man that requires a ton of such

goods, but by a number joining together and purchasing them at the cheapest rate there would be a considerable saving. Again, in sending honey to the Sydney market by the ton it costs about 33s, half a ton just a trifle more, so that by clubbing together another saving could be effected, providing, of course, the honey was of equal quality. Another benefit would be acquired by subscribing and filing one or more of the leading bee journals, such as the *American Bee Journal*, *Gleanings in Bee Culture*, etc. By so doing we would be posted in all the latest improvements that are taking place in America and other great honey producing centres of the world, and not only in appliances, but in the symptoms and treatment of the various bee diseases, such as foul brood and bee paralysis. Both of these diseases, I am sorry to say, have been in my apiary, the former being by far the most to be dreaded. As far as my experience goes in the matter of foul brood amongst bees, the cheapest and easiest cure is to take the hive, bees and honey, and dump the lot into a big fire. Some years ago, Frank Cheshire announced to the world his phenol cure. Hundreds tried it and pronounced it a failure (your humble servant was among the number); but to-day, for the first time, I see by the *A. B. Bulletin* that a Mr Clarke pronounces it an unequalled success, and winds up by saying, "Of all the many pretty processes in beekeeping there is nothing prettier than to see how the bees will clean out the foul brood when once you get them on a diet of phenolated syrup. It is like magic the way they work." I for one shall be very pleased to see it prove a general success. My idea of an association is that it should be a district one, representative of beekeepers residing at Boremore, Cargo, Cudal, Merinburn, Garra, Cumnock, Two-mile Creek, and Boomey. By having members at these centres of population, we could hold meetings in various parts of the district occasionally. (Applause.)

The Rev. W. C. Hughes said he was as yet only a modern beekeeper. When a boy he used to take some interest in bees, but until nine or ten years back, when he returned to his old district, where he was when a boy, he had not interested himself in beekeeping for many years. When the bee time came he obtained some of the industrious little insects and for the first time then he saw the bar-frame hive. He sent to Sydney and procured one, paying 22s for it, and to-day he could make one quite as good for 3s 6d or 4s. Ever since then he had always kept a few colonies of bees, and the longer he kept them the less he seemed to know about them. He was always asking questions, and he had one or two he would like to ask that night. Since making the bee a study he had got very interested in the whole matter and was ever glad to receive information from anyone concerning them. Apart altogether from any mercantile value attached to keeping bees, he kept some

colonies on account of the interest he took in them; but perhaps in time to come when he would be unable to earn his living in the manner he did now, the few colonies he had gathered might prove a source of income to him. He thought the movement set on foot to form a Beekeepers Association in Molong a very good one. Some good points had been mentioned in the Chairman's address, especially that provision concerning the working together of all who were interested in the industry. If an Association were established, the inexperienced and experienced could meet and the former would learn many things by those more acquainted with the bee, talking over matters with them and explaining things which needed elucidation. The preservation of the forest timber was an important question which should engage the attention of such an Association as they proposed to establish. The ruthless destruction of the timber of the forests was a matter of concern to beekeepers, but even apart from apiculture the question of preserving their forest timber was one which should engage public attention. The matter of putting honey on the market was another important thing for consideration, and there could be no doubt whatever, that if they were united they would have a greater promise of success than would be the case if they did not co-operate. He for one would be willing to join the Association—(hear, hear)—the meetings of which he would always attend as a learner, for he would be glad indeed to learn anything he could about the wonderful little insects. Once the society was established they could exchange ideas with other Associations on matters relating to beekeeping, and they would also, it was quite likely, be able in time to show the public to what use honey could be put—uses which at the present time he was not thought possible to devote it to. (Applause.)

Mr. Jno. Marston said he had been asked to attend that meeting and represent a number of beekeepers at Cummoek, who were of the opinion that an Association should be formed in the district. (Hear, hear) He personally thought it desirable to establish an Association in view of the fact of there being so many localities in the district where beekeeping was but in its infancy. He believed he had made more bee bees and frames than any other person in his neighbourhood, and he knew something about boxes, but perhaps not a great deal. Still what knowledge he had learned he obtained from Molong beekeepers (hear, hear) who were always, he found, ready to impart any information that was required. The beekeepers of Molong were very courteous and all that could be desired when anyone wanted to be enlightened on matters connected with their industry. (Applause.) He had pleasure in moving "That a Beekeepers' Association be formed in Molong."

Mr. W. Charters seconded the motion.

Mr. Jas. Packham, in supporting the motion,

said he had taken a good deal of interest in bees for many years, but he did not know too much about them, and would be glad of any opportunity to learn more. There was one thing the Association might deal with, and that was the freight charged by the Railway Commissioners for carrying honey to Sydney. If he remembered rightly, the freight for one ton of honey was £1 13s. 1d., and they could get two tons down for £1 14s. 4d. (?) The difference to him appeared ridiculous, and perhaps if the matter was brought under the notice of the Commissioners they would make an alteration.

The motion was here put and carried unanimously amidst applause.

EULES.

The rules of the Lachlan Beekeepers' Association were here read by the Rev. Mr. Hughes, and after a few slight amendments had been made they were adopted as the rules of the Molong District Beekeepers' Association.

ELECTION OF OFFICERS.

The election of officers was then proceeded with, and resulted as follows:—President, Mr. G. Packham; vice-presidents, Rev. W. C. Hughes and L. C. Young; treasurer, Mr. R. K. Hall; secretary, Mr. G. H. Davis. These officers constitute the executive committee of the Association.

Each gentleman returned thanks for the honour of having been appointed one of the first officers of the Association, and gave his assurance that every effort on his part would be made to foster the interests of the Society.

ENROLMENT OF MEMBERS.

The enrolment of members here took place, and 11 gentlemen handed in their names and paid their subscriptions.

GENERAL.

A brief desultory conversation on various matters in connection with the honey industry took place. A couple of questions were asked by the Rev. Mr. Hughes and answered by the Chairman, who was subsequently accorded a vote of thanks for presiding, and then a very pleasant and enjoyable meeting terminated.

THE LATE TAMWORTH SHOW.

A. A. ROBERTS.

I note in looking over the last *A.B.B.* you have not a complete list of the awards at the late Tamworth Show. Thinking you would like to have it and do justice to all, I enclose clip from the *Tamworth Observer*, which was kindly sent to me by some unknown friend.

Class 400—Honey in comb, most attractive display, G. H. C. McDouall; 2 entries.

Class 401—Honey in comb, best 6 1lb sections, G. H. C. McDouall; 6 entries.

Class 402—Honey, liquid, 6 jars, not exceeding 2lb each, S. Jacobs, 1; C. W. Coombe, h. c.; 13 entries.

Class 403—Honey, granulated, 6 jars, not exceeding 2lb. each, A. J. Brown 1; 8 entries.

Class 404—Beeswax, best 4lbs., A. J. Brown 1; 11 entries.

Class 405—Observatory hive and bees, Pender Bros., 1; J. Le M. Schomberg, h.c.; 2 entries.

SINGLETON SHOW.

The following are the Apicultural Prizes to be given at the above Show, to be held on August 19th & 20th, 1896:—

The following gentlemen have contributed towards payment of prizes in this section:—Messrs T. H. Moore, £1 10s; C. H. Dight, £1 10s; J. G. Dight, £1 1s; John Hayes, 5s; H. Atkinson, 5s. (The prizes in this section are offered free of entrance fee.)

Class 302—Extracted honey, most attractive display, not less than 50lbs. (labels allowed), 21s; second 10s 6d.

Class 303—Honey in comb, most attractive display, not less than 50lbs. (labels allowed), 21s; second 10s 6d.

Class 304—Comb honey, 6 1lb, sections 10s; second 5s.

Class 305—Extracted honey (liquid), 6 bottles or jars, 10s; second 5s.

Class 306—Extracted honey (granulated), 6 bottles or jars, 10s; second 5s.

Class 307—Extracted honey (liquid), not less than 12lbs., in screw-top glass jars, 5s; second 2s 6d.

Class 308—Two large frames of comb honey, Langstroth size, 5s; second 2s 6d.

Class 309—Three small frames of comb honey, half Langstroth size, 5s; second 2s 6d.

Class 310—Beeswax, not less than 7 lbs., 5s; second 2s 6d.

Class 311—Three sheets of comb foundation, 5s; second 2s 6d.

Class 312—Three empty combs, 5s; second 2s 6d.

Class 313—Wired frame of comb foundation, Langstroth size, 5s; second 2s 6d.

Class 314—Beehive, suitable to the district 10s; second 5s.

Class 315—Queen and bees in a single comb Observatory hive, 10s.

SPECIAL PRIZE.

One guinea to the winner of the largest number of prizes in the Apicultural Section, offered by Messrs James Moore & Co., Ltd.

HUNTER RIVER B. K. A.

A meeting of the above was held on 6th June in the Technical Schoolroom, West Maitland. Present: Messrs J. W. Pender (in the chair), Harden, Proctor, Paine, W. S. and G. Pender, and M. Scobie (secretary.)

It was decided that the secretary write to the Minister for a copy of the Food Adulteration Act, also to National Beekeepers' Association that this Association acknowledge the good work it is doing, and hope they would watch the above Act in the interests of the Beekeepers.

AN ACROSTIC.

R. H. LONG.

Dont despise us, for you see
Royal Consorts we may be
Or if we mate not with Queen
Not a worker bee is seen,
Even tho' no work we do
Still to us some honour's due.

When you see us on the wing,
O'er a flower all humming sing,
Robbing it of all its store,
Keeping flying back for more,
Ever haunting flowers and trees,
Remember, we are worker bees.

Queens, by prior birth are we,
Unrivalled in our majesty,
Eggs of workers, drones as well,
Each we lay in its own cell,
No other sort of eggs have we
So let us sing, God save the Bee.

Mr. C. U. T. Burke says: You can get different shades of wax when different trees are in bloom, and by proper treatment you can bring all to one uniform color.

A NEW IDEA ON FOUL BROOD.

A Swedish correspondent of the *Canadian Bee Journal*, gives a new view on Foul Brood. He says:—As I have noticed that even in very bad cases of foul brood, some larvæ—sometimes very few—are developed normal or agreeable with nature, it struck me that it would be a great advantage if I could rear queens and drones in such diseased stock, and breed bees from these queens and drones which had thus successfully resisted the disease. This I accomplished successfully, but have not yet had an opportunity of testing if such bees have become proof against foul brood, as I cannot get drones from the diseased hive only, on account of the presence of the number of small apiaries in the neighbourhood. However, I have bottled up pieces of very bad combs—at present I have very little foul brood in my apiary—and if I have an opportunity next year I shall isolate some suitable hive with foul brood, and place it on a lonely spot. If foul brood cannot be completely eradicated in this manner—which I am doubtful about, as my opinion concerns the origin of this disease is, that it belongs to the kind of epizootics, as we call miasmatic; contagious, and develops both internally ("endogant" and "exogent")—I think it will at least become less dangerous than it was before. This I infer from the fact that it was very common in Germany in the latter part of the century and the beginning of the present—in 1848, Dzierzon lost his entire apiary of 500 colonies by this disease—whilst it is now seldom so bad there as in England and Scandinavia. It should be very interesting to know if foul brood now is to be found in Cuba, Berlepsch says in "*Die Biene*," in Vol. 1873, page 202, that foul brood was nearly unknown in Cuba, ("so gut wie unbekant") but that feeder honey, after taken from that place caused foul brood in North America and Germany. I

know a large apiary where they have had foul brood for many years, but it is diminishing and becoming less severe every year. When a colony from this apiary had been sent to an apiary where they have not had the disease before, the bees there became very severely affected. I think that this seems to show that bees can become proof against foul brood by heredity. My idea is, therefore, to breed from bees reared in hives affected by foul brood on the principle of "the survival of the fittest."

G.G., Plumpton, June 8th.—Talking of white-headed drones, did you ever see a white headed worker? I saw a young one on the alighting board the other day wandering aimlessly about, her head covered with a white scale. I caged her for 24 hours when the scale came off and I returned her to the hive none the worse for it.

A. A. R., Muswellbrook, June 6th.—We have had a wretched season up here, the worst I ever experienced, but should we get rain it promises well for spring. Bees are now gathering a little honey.

H. H. D., Melbourne, June 6th.—Yours to hand. Thanks for answers. Allow the low average of 10 tons to 150 hives (instead of 30 tons) and then beekeepers ought to be men of money, but they are not. These yields, at least in Victoria, seem all theory, or why are beekeepers so empty in pockets? 300 hives giving 20 tons at £25 per ton, equals £500 (less expenses of say £200, at most) that is about equal to a salary of £6 per week. This is a low estimate for N.S.W. at least, and yet it reads fairly like indeed. Why, if it were the case I would leave my present position and with my brother become the bee-men I would like to be. I would soon be where I would soonest be. Yet who is there that makes on the average £150, or a decent living?

The great naturalist, Darwin, truly says: "The more bees the more flowers; the more flowers the more seeds: the more seeds the more flowers; the more flowers the more bees." The same is true of fruit as well as of seeds. Take out of this country all the honey-bees, and, after a year or two, they would be brought back at almost any cost, so marked would be the diminution in our seed and fruit crops.—F. Benton.

L.L.W., Vacy, June 10th.—Just a few lines to let you know how things are here. It has been one of the worst seasons I have experienced since bee-keeping, no honey the latter part of the year at all and very little in the beginning. The clover never blossomed on account of the dry winter and spring, therefore no swarms till December. Paralysis has visited me again this winter, but so far, it has been slight. I hope to have a better season next year. The Ironbarks and Stringybarks are loaded with buds, and the late rains are what they wanted to make them bloom. I have seen great discussion in the *Bulletin* about foul brood in trees. I have seen a great many fall on and have fallen them myself for the bees, and I never saw foul brood, though the swarms take a long time to enlarge on account of the queen mostly dying from one to three weeks after, on account I think of the fall when in full laying. Wishing the A.B.B. every success.

W. A. F., Stroud, June 11th.—Dear Mr. Editor, I am sorry I cannot furnish you with any good news, as this has been the worst season for honey that I have witnessed for this 30 years. I have not extracted one pound of honey, owing to drought and bush fires destroying everything before it. I regret to say that I have suffered great loss with my bees through paralysis. Out of about 50 colonies, I have only 10 left, two of the number are Italians, the only two I had in my apiary, and they have their hives full of sealed comb. The black bees I have been obliged to feed. No more of the black bees for me. I intend

to italianise what I have left next season all being well. Every prospect of a good spring, stringy bark and iron-bark laden with buds.

We would call attention that at Chalmers's Presbyterian Church, near the Old Exhibition Building, Sydney, on Tuesday afternoon, June 30th, the Rev. J. Ayling, will marry a well known and successful beekeeper, who wishes it to be a typical beekeeper's wedding. So all beekeepers who happen to be in Sydney on their way to the Convention are invited to attend. The train leaves at 5.15 the same evening.

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I allude to those who are anxious to obtain TIP TOP EARLY QUEENS, either Golden American or Leather-Coloured (Ligurian.) My Imported Queens from both America and Italy I expect to arrive about the end of August, and in a few weeks from then can supply Queens bred direct from them, and mated to select drones from last years' importations. I do not in-breed, or raise my queens in the haphazard fashion some do, by merely withdrawing the Queen from a colony and letting the bees raise what they like. I breed scientifically, and can warrant my Queens free from disease. I can guarantee 80 per cent. of my untested Queens to prove purely mated, and why? Because I do not live in a town surrounded by black bees on every side, where pure mating is almost impossible. I have almost sole control of my locality, and use every endeavour to let no drones but Italians fly, therefore my chances of pure mating are second to none in the colonies, To prove this, give me a trial, and I can please you. First come, first served. My prices are—

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Mr. J. P., Inverell, writes—The Golden Tested Queen I got from you is a beauty, and her daughters are equally as yellow, and perfect beauties. She arrived just too late, or I am certain I could have won at our Show with her. Book me two more for next season.

Mr. J. W. Walcha, writes—The seven Untested Queens you sent have turned out excellently. Book me 10 more for next spring.

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LEAFORD APIARY, PARKVILLE.

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A. A. ROBERTS,

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