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## **The Australian bee bulletin. Vol. 6, no. 7 October 25, 1897**

West Maitland, N.S.W.: E. Tipper, October 25, 1897

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# THE AUSTRALIAN BEE BULLETIN.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

VOL. 6. No 6. 7 OCTOBER 25, 1897. PER COPY, 6d

*Per Annum 5s, booked 6s 6d; in Australasia, outside N.S.W., add 6d. postage.*

## WAX WANTED !

AT ONCE.

11d. CASH; 1/- EXCHANGE.

PENDER BROS.,

W. MAITLAND.

### Can you buy the Timber as Cheap ?

**8-FRAME HIVES**, white pine, rabbetted sides, same pattern and interchangeable with American Dove-tailed Hives in lots of 10.

1-story, consisting of 1 body, 1 floor board, 1 flat roof and 8 Langstroth frames. 3/- each.

1½-story, consisting of 1 body, 1 half-body, 8 Langstroth frames, 8 shallow extracting frames, floor board and flat roof. 4/3 each.

2-story, consisting of 2 bodies 16 Langstroth frames, floor board and flat roof 4/9. ea.

**10-FRAME HIVES**, one-sixth advance on above prices.

Hoffmann Frames, if desired, can be supplied instead of Langstroth at an advance of one half-penny per frame.

**R. K. ALLPORT,**  
CHURCH STREET NORTH SHORE.



OCTOBER 25, 1897.]

## The Australian Bee Bulletin.

### "The American Beekeeper"

A Monthly, 36 pages, post paid for  
60 Cents. a Year. Now in 7th year.

We are one of the Largest Manufacturers of  
**BEEKEEPERS' SUPPLIES**

in the World. Export Prices Low.

SEND FOR PRICE LIST.

The W. T. Falconer Manufacturing Co.,  
JAMESTOWN, N.Y., U.S.A.

**W**ANTED someone willing to take charge  
of about 60 swarms of Bees on halves.  
Yellow box district.

(Signed) A. M. ROSE,  
O'Connell Post Office.

**W**ANTED Single Man to work Bee Farm  
and Small Fruit Land on half-share  
principle. Everything found.

For particulars apply to this office.

**M**ESSRS. DUNDAS & MIZEN have been  
appointed agents for the *A. Bee Bulletin*  
in Perth, Western Australia.

## 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 some-  
what 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.

Printing

DONE IN

GOLD,  
COLORS,  
BLACK,

TO SUIT.

Bee  
Bulletin  
Office.





# VICTORIA.

**BEEKEEPERS** In Victoria or Anywhere,  
I can supply you with

**QUEENS that are unsurpassed in Quality**

And Guarantee Safe Arrival and Satisfaction at the following Prices—

Untested—	One, 5/- ; Three, 13/- ; Five, 20/-
Tested—	„ 8/- ; „ 22/6 ; „ 35/-
Select Tested—	„ 15/- ; „ 40/0 ; „ 60/-
Extra Select Tested, the very best, 25/- each.	

I procure Fresh Breeding Stock EVERY SEASON, so as not to in-breed (a great factor I think in preventing Foul Brood). I had two from America lately, and expect half-a-dozen from Italy shortly. My colonies have averaged me the past ten years lewt. each—SUMMER COUNT.

**JAS. MCFARLANE.**

**LYNDHURST, VICTORIA.**

**Australia's Largest, Most Reliable and Most Liberal Queen Breeder.**

Untested Ligurian, Five-Banded, Cyprian, Italian, and Carni-Italian  
3/- each; 3 for 7/6. Tested 6/- Select Tested, 15/-

we receive regularly the *Naturalists*  
*Chronicle* published at Olney, England.

To hand, Messrs Hebblewhite's Catalogue of Bee Hives and Supplies. As usual it is very complete.

We acknowledge receipt from the Agricultural Department N. S. W. of the Report of Proceedings of the recent Agricultural Conference.

EVERTON.—Thanks for hint. The *A. B. B.* being published at end of each month, though we always make our "work" suitable for next month, perhaps it has been wrongly headed. In future we will call it "Seasonable Work."

Re paste for sticking labels on tins, plain flour and water is as good as anything with a little alum, but having the labels a little long so as the ends will lap over one on the other is a very good plan to have them stick on well.

Farm Bookkeeping, Recipes, and Medical Hints." It is edited by L. Lindley-Cowen. Evidently this young colony, with its immense wealth of land, not only intends to afford every facility to go on, but to give them every information that may assist them to be successful.

## HONEY ADULTERATION.

From R. A. Price, Esq., M. L. A., we have received the following correspondence in reference to the deputation of the N.B.K.A., which waited on the Department of Mines and Agriculture on the 31st August:—

New South Wales,  
Department of Mines and Agriculture,  
Sydney, 8th October, 1897.

Sir,—I am directed to inform you that the views in reference to the adulteration of honey expressed by the deputation which I received in



**A Stitch in Time saves Nine.**

And early orders save disappointment. If you intend to purchase Queens for the coming season, give me a trial. Book your orders now and pay on delivery. I can supply you with good prolific Queens, whose bees are good workers and gentle to handle. The very best imported mothers only are used, and for industry, gentleness and beauty, their bees are unsurpassed. Mismatched Queens are a novelty. Write for new circular and see testimonials.

**PRICES—**

	1	3	5	10
Untested Queens ..	5/-	13/-	20/-	39/-
Tested Queens ..	8/-	22/-	35/-	65/-
Select Tested (Breeder) 1 for 15/-, 2 for 27/6				

Honey or Beeswax will be taken in payment for QUEENS (if preferred) for all orders of 10s. and upwards. Safe arrival guaranteed to any Post Office in the Australasian Colonies.

I can also supply you with anything you require in the Apiary. Write for prices.

**A. A. ROBERTS,**

Rosebud Apiary, MUSWELLBROOK, N.S.W.

**Queens - Jubilee - Queens.****THE BEST. THE CHEAPEST.****My Queens are Superior to any,**

Because I possess and devote the greatest amount of skill, knowledge and experience to the **ART OF QUEEN-BREEDING**, which is a **SPECIALTY OF MINE**.

Untested, 5s.; Tested Pure, 15s.; Extra Choice, 30s. each.

On a number of Queens Special Quotations.

And all kinds of Bee Goods supplied.

**W. ABRAM,****Italian Bee Farm,**

BEECROFT, NEAR SYDNEY, N.S.W.

Winner of National First Prize and over 100 Special and First Prizes,

**DON'T FORGET**

When you are wanting **HONEY LABELS** or any description of **PRINTING** or **BOOK-BINDING** to write us and we will be pleased to execute same at very reasonable rates.

A. BEE BULLETIN.

**EARLY QUEENS FROM QUEENSLAND.**

**I** AM ready to execute your orders now for Queens of *this* season's raising. Thanks to a splendid winter my colonies are all in grand condition, honey is coming in nicely, and already I have thousands of choice young drones flying. I can furnish either leather-coloured Italian Queens raised from best imported stock, or beautiful golden Queens of my own well-known strain—the result of 14 years' careful breeding. **3.**—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

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**Bulletin**  
**Office.**



# National Beekeepers' Assoc'n

OF NEW SOUTH WALES.

Hon. Secretary,

MR. FRED. WARD,

Mulgoa Road,

Liverpool.

**Subscription, 5s. per Annum.**

Every New South Wales Beekeeper  
should be a member of it.

Rules of Affiliation Country Association,

August Number *A. Bee Bulletin*.

## The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

MAITLAND, N.S.W.—OCT. 24, 1897.

Unsealed honey can be capped by the use of a hot knife.

We receive regularly the *Naturalists' Chronicle* published at Olney, England.

To hand, Messrs Hebblewhite's Catalogue of Bee Hives and Supplies. As usual it is very complete.

We acknowledge receipt from the Agricultural Department N. S. W. of the Report of Proceedings of the recent Agricultural Conference.

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GET ONE.—Messrs A Hordern & Sons, of Haymarket, Sydney, announce in our advertising columns that their new catalogue is now ready and will be sent anywhere *Post Free* on application.

Have received Mr. H. L. Jones' Annual Catalogue. It consists of 50 pages of interesting matter to beekeepers, a list of everything he is likely to want in the apiary, and a lot of other things besides. Every Queensland beekeeper should get one.

To hand Financial and Statistical Facts relating to the colony of Western Australia, copy of statement presented to the Federal Convention by Sir John Forrest, premier of that colony, and published by the N. S. Wales Government.

From all quarters there seems a probability of a great honey flow throughout New South Wales during the coming summer. How about prices? The Government can help us in the matter by stopping the sale of adulterated honey in Sydney, by means of the Pure Food Act. Will they do so?

We have received from the Bureau of Agriculture, Western Australia, Part II of the *West Australian Settlers Guide and Hand Book*. This part includes "The Settlers Outfit, Clearing, Ringbarking, Cultivating, Harvesting, Gardening, Farm Bookkeeping, Recipes, and Medical Hints." It is edited by L. Lindley-Cowen. Evidently this young colony, with its immense wealth of land, not only intends to afford every facility to go on, but to give them every information that may assist them to be successful.

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New South Wales,

Department of Mines and Agriculture,  
Sydney, 8th October, 1897.

Sir,—I am directed to inform you that the views in reference to the adulteration of honey expressed by the deputation which I received in



the absence of the Minister on the 31st August last, were conveyed to the Board of Health, and the President of that Board has prepared a memorandum on the subject of which the attached is a copy.

I have the honor to be,  
Sir,  
Your obedient servant,  
D. C. M'LACHLAN,  
Under Secretary.

R. A. Price, Esq., M. P.,  
Parliament House,  
Sydney.

#### Memorandum of President of Board of Health.

The intention of the Legislature in framing Part VIII of the Public Health Act has been much misunderstood, but it appears to have been to afford the public protection against adulteration in two ways. First, any person who suspects that he has been supplied with an adulterated article can take proceedings against the vendor after observing certain precautions (see section 54); and, secondly, certain officers appointed either generally as officers of the Board, or of a local authority, or of the police, may—in some cases after receiving, in other cases without receiving special authority—take samples for the purpose of having them analysed. It is therefore open to the Beekeepers' Association to protect their trade interests by collecting samples and taking any proceedings which may be justified by analysis of such samples by one of their number acting in the capacity of "the person" mentioned in the opening words of the section mentioned above; or they or any of them may urge the local authority of the district within which suspected articles are offered for sale to execute the duty thrown on them by the Act. Or, should it be deemed necessary to move the Board in any such matter the method of doing this is provided in Section 58.

It may be thought that all prosecutions for adulteration would be best undertaken by the Board, but the law is not so framed as to show that this was the opinion of Parliament. But no doubt it is the Board's function to see that all parts of the Act are executed by the local authority, and as regards Part VIII they will from time to time cause such investigations to be made to secure this as may seem to them necessary.

The following are the sections 54 and 58 alluded to:—

54. The person purchasing or the officer taking or obtaining any food or drug with the intention of submitting it to analysis shall thereupon notify to the seller or person dealing in food or drug, or having it for sale, or his agent or servant, his intention to have the same analysed by an analyst, and shall offer to divide the food or drug in three parts, to be then and there separated, and each part to be labelled or marked and sealed or fastened up in such manner as its nature will permit; and shall, if required to do so, proceed accordingly, and shall deliver one of the parts to the seller, or person aforesaid, or his agent or servant.

He shall retain one of the said parts for future comparison, and submit the third part, if he thinks fit, to the

58. Upon complaint to the Board that any food or drug is being sold contrary to the provisions of this Act, such complaint being accompanied by a sample of the food or drug, and a report by an analyst supporting the complaint, together with an affidavit by the complainant that the sample submitted is in the same state as when purchased, and is the food or drug referred to in the analyst's report, the Board shall have the sample submitted analysed, and if the food or drug be found not in accordance with the provisions of this Act, shall direct a local authority to obtain a sample of such food or drug from a seller of same, and to have the sample analysed. The local authority shall act as directed by the Board, and, if the analysis show the food or drug not to be in accordance with the provisions of this Act, shall prosecute the seller.

Mr. R. A. Price has replied to same, and we await anxiously the reply. If the President admits it is the Board's function to see that all parts of the Act are executed by the local authority, what is keeping them back from doing so?

## AN APPEAL.

F. WARD, HON. SEC. N. B. K. A.

Dear Bulletin,—I would like to draw the attention of Associations and individual beekeepers to what cannot be looked upon as anything but their criminal indifference to their own interests and to the advancement of the Industry.

The National Beekeepers' Association is in existence to give attention to the wants and to protect the interests of all. Yet very few take the trouble to help even by suggestions or expressions of opinion. I refer alike to members and those who should be members.—To the whole fraternity.

If they would only do so it would help to strengthen the N. B. A., and the Association must be strengthened if it is to do the work that the industry demands.

Let us consider one of our enemies,—Adulteration. This has been brought under the notice of the Department several times, yet nothing has come of it.

Will beekeepers please ask themselves why? Think over it and suggest a way to overcome that enemy.

We all know the Government is an intricate machine, hard to move, but it can be set going if the right lever is found.

If we show we are an united body—and I think we are on this question—they will no longer dare to ignore our



Perhaps if we use the committee of the N. B. A. as the thin edge of the wedge, and apply the whole force of the N. S. W. beekeepers, it may pierce through the apathy that surrounds the Department.

There can be no doubt that the adulteration carried on lessens the demand and so helps to keep the floors of the agents stacked and the price down.

There is one way we can lessen the evil. Perhaps the quickest way. It is to initiate prosecutions. But the Association must have funds for the purpose.

The fee of membership is small, and beekeepers will further their own interests by joining. Country associations will further the interests of beekeepers by becoming branches of the N. B. A.

All can help with their opinions and suggestions, and I hope they will do so.

## N. S. W. PRODUCTION.

Number of Colonies of Bees and Production of Honey and Wax,  
Year ended 31st March, 1897.

Colonies.	Produce	Unproductive	Honey.	Average per hive.	Beeswax.
Northern Division	14696	3180	688182	46.8	13698
Hunter and Hawkesbury Valleys	3898	1164	151416	38.9	3359
County of Cumberland & Metropolis	2122	1495	451446	21.3	1079
Table Land	4641	704	275012	59.2	7185
Western Slope	507	15	35084	69.2	115
Southern Division	6676	2775	182449	27.3	6366
Western Division	17	10	750	44.1	40
Total New South Wales.	32557	9343	1378039	42.3	31842

Value of Honey Crop at 2½d per lb £14,354.

" " Beeswax at 9d per lb £1,194

## Imports and Exports of Honey and Beeswax, &c., 1896.

Article	Imports		Exports.			
	Q'ty	Value	Produce of N. S. W.		Other Manufacture	
			Q'ty	Value	Quantity	Value
Honey	38020	1117	24137	314	24437	314
Beeswax	1148	31	42278	2121	42446	2130
Bees	2pkgs	3	3pkgs	12	3 p'k'g's	12
Beeskeepers material	958	629	10	16	47 p'k'g's	151
					pkgs	
					packages	

These figures are compiled from the Government Statistician's Register and may be taken as a fair index to the importance of the industry.

Taken with the present low price of honey and the glutted market the imports and exports of honey appear lamentable.

F. WARD.

## CRUMBS.

AUSTRALIAN YANKEE.

I am surprised to see that anyone should so misunderstand my Crumbs on page 86, as I see Mr. Jervis does on page 141. I never meant to say that I did not approve of prolific queens or the rule of keep your colony strong, as that is what I aim at every time. What I meant is this, that the queen should be restricted from rearing too much brood during the honey flow. In the spring before the honey flow commences I would do all I could to get the queen to fill 16 Langstroth frames with brood, using two stories of the eight frame hive, or if I could get her to fill 24 frames, so much the better, but as soon as the honey flow commences I want her confined to eight frames, using a queen excluding honey board. I claim that a capacity of eight Langstroth frames is sufficient to keep



up the strength of a colony during the honey flow and to allow a queen to deposit eggs in more frames is only a loss to the harvest. We not only lose the amount of honey that it takes to feed the larvae, but the honey that it takes to feed the brood, would gather. This you see is a double loss.

Mr. J's remarks with regard to his nuclei, is, I consider clean away from the argument. His nuclei I suppose contain only three frames and are often without a queen. Were he to build them or rather allow them to build up to six frames before the harvest, using a two story nucleus hive, and then at the very commencement of the honey flow place three frames containing hatching brood in the lower one and lay a piece of excluding zinc over the frames and set the upper story on this, having the queen below, then extract from the upper frames, he would get as much honey for the number of bees at the end of the season from this three-frame hive as he would from a ten-frame hive. I know this, as I have used a nuclei thus for experience.

#### ARTIFICIALLY FERTILISING QUEENS.

On page 130 Friend Bennett wants me to say if I clipped the wings of the queens that I succeeded with. Yes, sir, I clipped their wings whilst the drone was adhering to them, cutting both wings off short so there could be no mistakes. One was a black queen to which I mated a very yellow Italian drone. She produced very good hybrids. The other was an Italian and she produced three banded workers. Friend Griffin says it is only a lot of stuff, and the drones will see to that better than we can. I beg to differ with you, Friend G.; the drones will see to it, yes, but an ugly little wizen of a black drone is as likely to mate with our choice Italian queen as not, whereas could we succeed in fertilising our queens by hand, we choose the individual drone for the queen to be fertilised, thus improving our bees. I for one intend to keep experimenting until I find a sure way or prove that it is impossible.

I would also like to say, "Thank you" to "Sparrow" for the kind words on page 144. I am afraid I don't deserve all these good words. I had almost concluded not to write any more crumbs, thinking that they might not be appreciated by the readers of the *A. B. B.*, but if they are of any benefit to others, I shall be only too pleased to continue them. I quite concur with Sparrow in what he said re the mistakes of new beginners it is the height of folly to advise, all and sundry to go in for beekeeping as there is none too good a market for the product of those who are in the business now. Also, I think our Editor should not publish articles from mere novices, as a person requires some years of practice and study before he is fitted to advise others.

#### MOTHS.

From what I wrote in my last batch of Crumbs one would think I hated the festive moth. Not so. I feel like taking off my cap and making my best bow to him. You ask why. Just because he keeps the bees nests and scrub beekeeper in check; were it not for him and Foul Brood, our markets would be flooded knee deep with bush and strained honey. Of course I would not think of allowing one to live in my apiary. Oh, no, let him go off to the bush or the gin case beekeeper, and fatten there.

Did you ever consider what one swarm of bees could do by way of increase. If not just read the following, and see what we would do if there was no moths or disease to hinder the increase. It would take a skilful apiarist to increase as fast as the following, but allowing a fourth as much increase by natural swarming, and where would we be?

What a Hive of Bees may do in 13 Years.—It may be increased to 412,569, 619,618 colonies, these would require in the brood nest alone 8,251,392,392,960 frames, and would require 1,239,908,858 944 lbs of foundation comb, and it would employ 2,062,848,098 men to work them and in a good honey season they would yield 101,079,056,813,760 lbs of extract-



ed honey. This at present top prices would be worth £1,239,708,858,944. They would also produce about 512,569,628,679lbs of beeswax, worth another £25,628,481,443. I might go on enumerating *ad lib* as to how many forests would vanish in the attempt to furnish timber to make the hives, etc., but I forbear as the above is enough to show to what an alarming extent the honey bee is capable of extending its borders if we were to stamp out all its enemies. For all that good apiarists should strive to keep all disease, etc., out of his apiary.

#### LANGSTROTH MEMORIAL.

I think that all beekeepers should give a small sum of money so as to raise a suitable monument to Father Langstroth. I propose that every reader of the A.B.B. give one shilling, sending it to the Editor and he to forward it to the A. I. Root Co., who will see that a suitable memorial stone is raised over the resting place of our benefactor. Now, brothers, send in your shillings and as much more as you can afford. It is a shame and a disgrace to us as beekeepers that there has not been a stone raised over our departed friend ere this.

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#### VICTORIAN NOTES.

R. BEUHNE, TOOBORAC.

Notwithstanding the statistics of honey production supplied by Mr. John Bush in last *Bee Bulletin*, I consider the calculation based on the export of Wax, as supplied by Mr. Chambers from the customs returns, more reliable. Of course I don't know how agricultural statistics are collected in N. S. W. but I do know how its done here and many others can support me in this. I have not been asked for any statistics for the last five years and only twice in ten years. The practice then was to give an estimate of the probable yield, the statistics being collected before the honey flow. As the official who called for the returns was a local man, and I had no desire to see a Bacillery established in

my neighboured on the strength of my statistics, I made my estimate with becoming modesty. However if its any satisfaction to anybody that N. S. W. produces more they are welcome. It all depends upon through what kind of spectacles you look at it. Thus N. S. W. produces more honey, because it has no duty on hives, or because it has a larger territory, or a better climate and honey flora, or because the schoolmasters keep bees, or because the Government has sent paid Bee Missionaries all through the colony, etc.

On the other hand Victoria exports more wax because there is no duty on it, and a large share of N. S. W. wax comes through Victoria, or because less wax is used locally, or because more bees are still kept in gin cases (producing a greater proportion of wax against honey) in consequence of bar frame hives being beyond the reach of most people on account of their high price owing to protection.

The Drone in the *Australasian* also looks through his own spectacles and comes to the conclusion that Victorian beekeepers are in favour of free trade, and that N. S. W. beekeepers are in favour of protection because they don't know what protection is. Just so, but doesn't that argument fit both ways. Victorians don't know what free trade is—they never had it (but N. S. W. Beekeepers have had both if I am not mistaken.)

Referring to the Drone says that I believe in protection, because Victoria exports more wax than N. S. W. That may be a little obscure to axiomatic truth logic, but wax is not produced by itself but by the product of honey, and duty or no duty stands in a certain proportion to honey. But that is not my reason, as the letter (enclosed for the editor) shows, which was published before Mr. Chambers supplied export statistics. So please don't give my reasons or I'll give yours for suffering from chronic nightmare of Foul Brood legislation.

I am also entitled to share in that pat



on the back for his answer to question 117 which friend Bennett gets, (making him laugh audibly,) for that is just the way I stated the case before the question was asked.

#### PARALYSIS.

Appears to be pretty much in evidence in Victoria north of the Dividing Range. In many cases its first appearance can be plainly traced to the introduction of a queen from one or the other of the northern colonies and I could name half a dozen apiarists who got their paralysis from one and the same breeder. I have no doubt that the queens in the first instance were perfectly sound in their own locality but not suited to the climate conditions of their new location. The introduction of new blood is not an unmixed blessing and I am inclined to think there is less risk in inbreeding than in too high-breeding. Those who have had experience with paralysis will agree with me that the progeny of the most prolific queens are the most subject to it. The workers of very prolific queens are also often short-lived without having any disease. These colonies have always great sheets of brood and are very populous in young bees, but they do not give a proportionate yield of honey. A colony which will keep strong with a comparatively small amount of brood rearing, is the most profitable and the one to breed from. That certain strains of one and the same race of bees are more subject to paralysis than others, I have not the least doubt; often with a few exceptions all the daughters of a particular queen will produce workers predisposed to paralysis and in the exceptions it will reappear in the next generation.

From my queen register for the last five years, I see that the best queens and the least inclined to swarm were those raised in March, February next, and so on backwards. Early Spring queens although sometimes very prolific for a short time were short-lived or soon turned drone-layers.

FROM *The Sunday Beekeeper* BY  
GREENBEAK

At the monthly meeting of the C. D. B. K. Association, John Worrihim proposed that the support of the association (crutches) be given to Candidates for Parliament who are in favour of Free-trade, Free foul brood, Free glucose and cheap honey, as it was the intention of several members to live near town as soon as their girth measurements have increased to the dimensions entitling them to a residence in a fashionable suburb, honey production in town being more profitable than in the country.

Fertilizing queens by hand is a very old fashioned way—it should be done by machinery.

Mr Tipper makes very light of cockroaches. I think they are rather dangerous to have about the hives when drones are scarce, for by mating with young queens a very undesirable cross would be produced, a bee which could get into your honey house through any small slit. Cockroaches however, have some compensating advantage, if your hive is very weak and the cockroaches numerous enough they help to keep the brood warm.

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#### ADULTERATING HONEY.

Adulterated honey.—Three grocers fined for selling it in Canada. Judge Dugas this morning heard three cases of parties accused of selling adulterated honey. The persons accused were L. P. Forest, 1978 St. Catherine street; J. F. Fraptier, 2150 St. James street; and Lamoreux & Co., 188 Amherst street. Mr. Roy appeared for the accused, while Mr. J. M. Furguson prosecuted for the Department of Inland Revenue. Judge Dugas over-ruled the defence raised in each case, which was that the parties sold in good faith, and not knowing of the adulteration, which being cane sugar and glucose was not injurious to the health and beneficial rather than otherwise. The court held that the public must be protected and had a right to



know what they were buying. It was well known that adulteration of articles of food was extensively practised in Montreal and it must be stopped. However, as the defendants appeared to have acted in good faith, he would impose the minimum fine of five dollars and costs in each case.—*Canadian Bee Journal*.

France knows how to protect the rights of her people. Anybody who doubts the genuineness of an article of food that he has purchased from a Parisian tradesman may take it to the municipal laboratory for analysis. It will cost him nothing to have it analysed and the fact determined whether it is unadulterated or adulterated; and if the latter, the law deals with the offender without further action on the part of the purchaser. The storekeeper is liable to be heavily fined and imprisoned, and has to display conspicuously in his shop window or on his door for a year a large placard bearing the words "Convicted of Adulteration."

## REAL CAUSE OF FOUL BROOD

Mr. Wm. M'Evoy Official Foul Brood Inspector for Ontario, Canada, says;—Foul brood is a disease that is caused by the rotting of un-cared-for brood. It usually originates in spring in weak colonies that have spring-dwindled so badly that they have not bees enough left to cover or care for all the brood, and if the spring keeps raw and backward the bees will crowd together to keep each other warm leaving the uncared-for brood to die and rot in the cells. The brood covered by bees in time hatches, which so increases the force of the colony that a wider circle of comb is covered by the bees taking in the space occupied by the decaying brood. Then the brood that is fed in these cells where brood lately rotted down, will have to consume their food mixed with the remains of decayed brood, and that is the whole, sole, real and only cause of foul brood. In the bee-yards of beginners,

over-worked farmers, and business men (whose time was fully occupied in other things) is where I found many a foul brood nursery. When brood has rotted and advanced to the brown-rotten matter stage it is then a very dangerous thing and if a large quantity of that is put in a weak colony it will start foul brood at once. The so-called scientists have done a terrible lot of damage by saying that the rotting or uncared-for brood could not cause foul brood; that sort of teaching has caused bee-keepers to be very careless, and when foul brood has broken out in their apiaries, it makes rapid headway because the owners did not take proper care of their colonies, but depended too much upon the so-called scientists who are not practical beekeepers. Some bee-keepers believe that the empty hives that had foul brood in, will cause foul brood if not boiled, scalded, or disinfected, which is the greatest of nonsense. An empty hive never, no never, gave the disease, and never will. I always tell the owners not to waste their time in disinfecting or doing anything with the old hive, but cure the disease right in the same hive, which they always do. Some think that the queens in very badly diseased colonies will cause foul brood, which I know is anything but a fact. I often have to put two, three, and sometimes four weak colonies into one, that have been so used up from foul brood, in order to get a fair colony to make it pay to cure them of foul brood. In such cases, if the queens suit me, I get them for nothing, and bring them home and do away with some poor queens, putting these queens from the foul colonies into my own. I have proved it in every possible way, and I know for a fact that the queens never did cause foul brood. Comb foundation has been blamed for helping to spread foul brood, which is not a fact. I defy any man to cause foul brood from foundation made from wax rendered out of the worst of foul broody combs. The disease is spread by the bees robbing foul broody colonies, and they carry the disease just in proportion to the amount of diseased honey they convey to their own hives.



## FOUL BROOD

G. W. GORDON.

Dear Sir,—I am very pleased to see you are not above taking any suggestion for the benefit of beekeepers, and I hope what I intend to write will get the same consideration as my previous letter. And if I am wrong kindly point it out, always bearing in mind that a false step might ruin an industry, and we by our silence give consent to that step. I allude now to the Foul Brood Act (proposed.) Now, Sir, I am in favour of such an Act, but I have my own reasons, but when I read of a man of Mr. Gale's standing asserting that Foul Brood was in every part of the colony, it simply knocks the very ground from under my feet, and the very reason I have for wanting a Foul Brood Act is converted into a reason against such an Act being put into force. Inasmuch as Illawarra, where I have never heard of Foul Brood, and where my interests lie, will be put on the same basis as a district where Foul Brood exists in every other hive. And from what information I could gather on a visit last year and one visit this year, Foul Brood is unknown on the Richmond and Macleay Rivers, and if I am correct about these rivers Mr. Gale's statement is a gross libel. I am sure it is as far as this district is concerned. And if an attempt is made to pass an Act that is going to declare the whole colony infected and not give districts where foul brood was never known the benefit they should derive from such a fact, I must give such a measure my strongest opposition, and I will claim the support of all beekeepers living in non-infected districts. Why sir the very fact of such an act being in operation would debar us from trading with other countries. No man in his senses would buy queens, wax, honey, or any other supply from a place where disease existed, and under such an Act the innocent would be made to suffer for the guilty. Pass an act by all means, tax us 1/- or more per hive to work the act. But let them who live in clean districts get the

credit of it under the act. So much for Foul Brood, now a little on Adulteration and Co-operation. When I named the South Coast Co. in my August letter, I did not anticipate you would accept the suggestion so readily or I might give you some hints privately that would have helped your committee. But I trust that you came to a mutual understanding which will benefit beekeepers generally. My opinion re adulteration is strike at the root and you kill the whole thing, the Middlemen, and the Bottlers—that's the root, and your Co-operation is not complete until beekeepers pay a Bottler and give him a registered trade mark, and declare any honey bearing this trade mark genuine and keep that fact advertised before the public. But, sir, I am taking too much of your valuable space, and I am sure the company will meet you in every way possible. Thanking you in anticipation.

## DOES ALL OF THE HONEY IN A FOUL-BROODY COLONY CONTAIN GERMS.

*By R. Taylor in the Beekeeper's Review.*

The following paper is by Mr R Taylor, Experimentalist at the Michigan Experimental Apiary, U. S. A:—

Two cases of foul brood were discovered during the season of 1896. These were treated as heretofore by putting the bees into clean nives furnished with foundation and the diseased hives with their combs disinfected with heat. The treatment was completely successful as has uniformly been the case heretofore. The two important considerations in the operation are that the management be so careful and guarded that no bees from the diseased colony be driven to other colonies and that no bees from healthy colonies be permitted to visit the combs of the diseased colony. The reason upon which this caution is founded is that the germs of the disease are liable to be carried from the diseased colony to healthy ones in its honey—at least it is



the supposition that there is such liability. We know certainly that robber bees when engaged in robbing a diseased colony carry the infection to their own hive. We are certain also that honey extracted from combs which have contained the diseased larvæ convey the disease to colonies that use it. But to have this effect it is not necessary to suppose that every cell of honey contains germs, and when we consider how small a proportion of a larvæ are freshly affected with the disease at any one time, and that the progress of the disease in a colony is generally quite slow, it is natural to suppose that but a small proportion of the cells of honey contains the germs. There would perhaps be an exception to this if a strong colony became badly affected with the disease towards fall, say in August, when its hive was well filled with brood and when a good flow of honey occurred in September, for in that case, in the ordinary course of things, as the dead matter of the larvæ dried down, the cells containing it would be filled with honey. It would seem inevitable then that a large proportion of the cells of honey should contain floating germs so soon as sufficient time were given to allow the honey to soften the dried matter. After this the cells containing affected honey may be largely increased in numbers by the removal of the honey from cell to cell as in the spring when brood rearing is resumed. Cowan in his celebrated work laid it down as a scientific fact that the germs of foul brood were not to be found in the honey. This conclusion was not accepted in this country because it was found that practically at least it was not true. I doubt if Cowan himself would deny that the germs could be mingled with honey by the hand of man and if they could then they also could, in the ways I have herein before indicated, by the bees. With these exceptions was not Cowan correct? This is a matter of considerable importance, because a true answer to the question would give us a pretty clear insight into the methods by

which the disease in question may be disseminated. If Cowan is correct, with the limitations suggested, then the disease cannot be conveyed by germs floating in the air or carried about on the bodies of the bees, otherwise they must certainly be carried to the honey in open cells throughout the hive. With these thoughts in mind I made an experiment with honey taken from one of the colonies operated on. The colony was quite badly affected, there being in the space occupied by the queen from one-fourth to one-third of the cells that contained dead brood. The honey was contained in the two outside combs of the upper section of the Heddon hive. The combs contained five or six pounds of honey and had apparently never contained any brood. The honey was fed to a colony of moderate strength and very short of stores but actively engaged in the rearing of brood, by placing the combs in a story above the honey board through which the bees came and carried the honey below until it was all gone and evidently all or nearly all used in nourishing the growing larvæ. In this experiment the thoughts were that if the honey contained the germs that fact would certainly be revealed by the appearance of the disease among the brood below and that the continued absence of the disease would be pretty satisfactory evidence that *that* honey contained no germs, and, consequently, in so far as one experiment goes, that they are not carried about by the action of the air nor upon the bodies of the bees. Several examinations were made of the colony during the latter part of summer and early fall to discover the existence of foul brood if such were the fact, but no trace of disease was found. If enough further experiments give the same results a decided relief will often be experienced in dealing with the disease as where there are considerable amounts of surplus honey above the honey boards. Continued observations have been made in the cases of two experiments which have been heretofore reported; one of these was the immediate intro-



duction to a healthy colony of a queen taken from a colony so badly affected with foul brood as to be about worthless. Examinations the last season show that the colony to which the queen was introduced remained healthy as had been anticipated from the fact that it had revealed no signs of disease the previous season. This seems to show pretty conclusively that a queen is not necessarily diseased herself though she has been for a long time in a badly diseased colony. The other one was the case of a colony of which mention has been made several times heretofore, in which what to all appearance was foul brood showed itself without making apparent progress, disappearing altogether at times and reappearing again to the extent of a few cells only. During the last season it did not show itself in the colony at all. It would be of interest to know certainly whether this was a case of true foul brood, and if it reappears an effort will be made to have the point determined by a competent microscopist.

## POLLEN OR BEE BREAD.

R. H. LONG.

Pollen is the Bee Bread  
 Made of lovely *flower*,  
 Baked in petaled oven,  
 Through each summer hour,  
 Bees like little bakers  
 Knead it in the skies,  
 For it needs no yeasting,  
 It is sure to *rise*.  
 Come and see my bakers  
 Bringing home their bread  
 Packed on their wee baskets,  
 Yellow, white and red.  
 But when bringing bee bread  
 This upon your oath,  
 Have you known the bakers,  
 Have a real good loaf?

## BACCHUS MARSH B. K. A.

H. SIMON, HON. SECRETARY.

The usual monthly meeting of the B. M. B. K. A. was held at Hollis' Tea rooms

on Wednesday, Oct 6th, Mr. W. Smith, (President) in the chair.

The minutes of the previous meeting were read and confirmed. Business regarding an exhibit for the coming local show was discussed and it was decided to make as good a display as possible members promising to do all they could to make it a success.

The general opinion of members present was that their bees were not as forward as they were this time last year.

A discussion on swarming followed. Where increase was desired the President advised dividing, especially where a man was not always at home to watch for swarms.

## THE IRONBARK.

THE HERMIT.

Many petalled, snowy clusters  
 Half hidden by the sombre green,  
 Of narrow leaves that far aloft,  
 From untrained eyes their beauty screen.

The parent stem, which you have power  
 To rival by your tiny seed,  
 Unbending dares the storm and shower,—  
 Strong to resist in time of need.

What better emblem can there be  
 To paint with England's oak and rose?  
 A standard for a nation's strength  
 To frighten war, to court repose.

Hard to resist decay by time;  
 Tough to withstand all sudden blast,  
 Straight to ascend it ever strives  
 Firmly to earth its roots are cast.

While yet cold winter's blast is heard  
 Sighing its way among the trees,  
 Your lovely blossoms' sweetness court  
 The gentle wooing of the breeze.

Let others sing the joys of town,  
 Give me the forest wild and dark,  
 Where gill birds bask in leafy tops  
 Of the rugged white-flowered ironbark.

Mr. W. L. Coggshall's honey crop in 1896 was 78,000 pounds. He is perhaps the largest bee-keeper in New York State.

R. J., Macleay River Heads:—I am pleased to say that I have received my paper regularly for past nine months, and fall in with some others of your readers in wishing the A.B.B. were twice the size. Bees appear to be giving good promise for this season.



## CAPPINGS.

*From American and other Bee Journals.*

Removal of combs containing pollen retards swarming.

The past season in the United States has been the best for white clover for 15 years.

A tin cylinder is useful to cut out defective portions of combs to be replaced by comb of exact size from other combs.

A bunch of green grass tied at one end with a piece of string, then trimmed after pulling out the hard stalks, is said to make a good bee brush.

Professor Harrison says there is more formic acid generated from buckwheat than from clover, the stings when bees are working on buckwheat being more painful.

If bees are clustering outside on a warm day place blocks under corners of hive, and give room by means of supers or taking honey from them, or perhaps a sack thrown over the hive might lower the temperature.

L. A. Aspinwall, in the *Beekeepers' Review*, says he uses a little beeswax within the smoker cone. By reason of the heat it spreads rapidly over the entire inner surface, and to a great extent prevents adhesion of the carbon particles.

In Iowa, U. S. A., a man who sold paraffine for beeswax, was fined 75 dollars and all costs and expenses accrued, besides satisfying the firm to whom he sold it and the expert's travelling expenses. *The poor fellow would not be annoyed like that in New South Wales. He could do it with impunity here, thanks to beekeepers themselves*

A lubricant by B. Rietsche is as follows: Put 2 oz. soft soap in a little sack. Stir the sack in 5 quarts of warm water till the soap is dissolved, then add 5 quarts cold water. The plates of the Rietsche press are plunged into this liquid, and by this means 150 sheets of foundation are now made in an hour. So it is said!

To introduce a virgin queen.—Simply take one just out of the cell and place it right on the brood-comb among the bees. You may also succeed with one of any age, in the following manner: Make

sure that there has been no unsealed brood in the hive for 48 hours; go to the hive just after bees have stopped flying in the evening, and quietly drop the queen on top of the frames allowing her to crawl down.

Dr. E. Gallup says in *The American Bee Journal*:—I have a sure cure for fowls, and why not for bee-paralysis? It has certainly worked in my case. I am aware that one swallow does not always make a spring. Cutting the heads off of sick fowls instead of keeping a hospital and using this and that "sure cure" medicine, is the very best remedy.—He kills the diseased queens and introduces healthy queens.

The *Southland Queen*, says:—I do not know of anything further to say than to mention that queens sometimes become egg bound after laying for a time. Again some queens only receive a partial mating and soon lay out all their eggs. This is mostly caused by such queens being raised from worker larvae too old and they are not fully developed queens, though they appear all right at first.

L. A. Aspinwall, in the *Beekeepers Review*, says:—As a summary we have as the prime cause of swarming—Bees; and some eight or nine factors. Temperature, ventilation, drones, pollen, honey, the influence of a honey yield extending into a failure of the honey sources, the swarming impulse, the inherent tendency, and lastly, that under the circumstances of supersedure. With a crowded condition, one or more of these factors influence the issue of swarms proportionally as they are present.

I roll up my shirt sleeves, take the kerosene can and rub my hands and arms well with the oil. I then slip a pair of old stockings with the feet cut off (which I keep for the purpose) over my arms, and go to work, and though I may get stung, I find there is no after swelling nor irritation. May be some of our fellow bee-keepers, whose skin is rather tender, may find this remedy a good one.—J. W. Denyer. in *A. B. J.*



G. M. Doolittle, says: "Hundreds of experiments in using larvæ from three hours old up to those of 36 hours, prove that queens from the former are in no way superior to those from the latter, while the bees always choose the latter where the choice is left to them."

Dr. C. C. Miller, says:—At the present time I am working from early morning till dark, with the aid of an assistant doing the work of 239 colonies, spring count, worked for comb honey, getting up at 3 to 4 o'clock so as to get in the writing I have to do.

A Mr. McKnight, says in *The Canadian Bee Journal*:—The British standard for vinegar is that it contain five per cent. acid and have a specific gravity of 1.019. In order to have a vinegar which will come up to that standard, the use of a pound and a quarter of raw sugar is required, and I do think two pounds of honey contains more saccharine matter (which goes to make up the acid of the vinegar) than is contained in  $1\frac{1}{4}$  pounds of raw sugar.

Mr. A. F. Hoshal, says, in *The Canadian Bee Journal*:—When putting a new swarm into a hive, if I wish comb honey, I make it a rule to put supers on at once and put in a queen excluder, to keep the queen down for a few days; but I feel that a queen excluder more or less annoys the bees and hinders the work. After the queen gets nicely to work I slip the queen excluder out. Mr. Davidson—I never use a honey-board or queen excluder when wanting section honey, but if extracting from the top I do use one.

T. S. Ford says—I have myself known one case where the bees had apparently fully recovered from paralysis, and no sign of it was to be seen. I took the queen, which appeared healthy, and introduced her into a colony in an apiary a quarter of a mile off, where there had been no disease, and yet in thirty days the malady broke out, and in three months the colony perished with the worst case of the disease I ever saw.

In the state of Washington, U. S. A.,

bees are assessed at 2 dollars 50 cents per colony. Dr. C. C. Miller, says:—I pay taxes on my bees as well as my horses, and at the same rate according to their value, and I see no reason why I should not. Taxes are paid to keep the machinery running that secures us protection of our property, and if a man should steal one of my colonies I would appeal to the law just as promptly as if he stole a horse. If I should refuse to pay the tax, the courts would promptly decide against me. Even if assessors in other countries failed to assess bees, that would make no difference—I would have to pay the tax all the same.

Mr. J. E. Pond's way of introducing queens:—On the morning of a clear day, when the bees are flying freely, I remove the old queen, placing the one I propose to introduce in the top of the hive caged as ordinarily sent by mail, and there leave the cage so that the bees can have access to it till the time to let her out. In the evening of the same day after the bees have all returned from the field, and are quietly settled at home, I blow a little smoke in the entrance of the hive, wait a few moments till the bees have filled themselves with honey, then remove the cage and queen from the top of the hive, open the cage, and allow the queen to run in at the entrance, as though she had always had her home there.

L. Skaggs, in *Southland Queen* says: To make a good uncapping arrangement get a sound barrel, take out the head, put a faucet near the bottom and a wooden hoop at the top. Now make a cheese cloth bag that will go over the top of the barrel. It should sink two or three inches inside and go half way to the bottom of the barrel. Put a very thick hem around the top of the sack. With a small rope bind the sack to the barrel below the wooden hoop so it can't slip, then fix a frame of wood to fit on top to stand your honey frames on while uncapping. Let the cappings fall on the sack and the honey will all drip down into the barrel. No ant, bee or anything else can get in, so that your honey, when drawn, will be ready for market.



E. R. Root, says:—There were several —put in hives, for they say it gives less of our colonies at the home yard that seemed to be very stubborn. Two of them would hang out in spite of the fact that I personally alternated every one of their frames of brood and honey with frames of foundation. The *habits* had been established, and, no matter what I did, they *would* hang out. Finally, the thought occurred to me to take the hive away entirely (a big two-story chaff one) and put in its place an entirely different hive—a single-walled Dovetailed made up of three stories. This was done, and the frames put into the new hive. The greater portion of the bees were shaken out in front, and were made to crawl in at the entrance. The bees went to work, and there was no loafing from that time on. Another hive was treated in a like manner with the same result.

In Sarawak, India, Malays, Chinese, Klings, and Europeans all give bees a wide berth. Dyaks alone keep them. Their knowledge of their habits is much like that of old Romans; they talk of the Rajah, tho probably few have seen her. The drones they call *badorken*, but have no idea that they are the males, or that the rajah lays eggs. A nest of *dorsata* the Dyaks highly value. They eat the brood, but sell the wax, and the honey, too, if they can, to Malays, who trade up the river. They take the nests by building ladders up the tree or cliff. Ascending these on a moonless night, they hold a torch beneath the nest and drive off the bewildered bees before cutting down the comb. Next day the bees leave the place and try their fortunes elsewhere. There is a right of ownership of nests on favorite trees or cliffs. Colonies of *Apis indica* they keep in hives made of bark, or hollow logs of wood, narrow, but two to three feet long, with the entrance in the middle suspended lengthwise from the floors of their houses, which are raised many feet from the ground on poles. They take the honey and brood at night, driving the bees out of their hives by means of smoke. Next day the bees leave the place. *Apis flava* they seldom

—put in hives, for they say it gives less honey and brood than *Apis indica*. *Apis florea* I believe they usually avoid —*English Bee Paper*.

Dr. C. C. Miller, says, in the *A B J*:—If you try both ways, you will probably decide that you like the use of the excluder better than without. Then you're sure to have no brood in the way when extracting. Another important item in the opinion of many—an opinion that is constantly gaining ground—is that honey extracted from old combs that have been used for breeding is not as good as that from combs that have never been so used. Take an old comb out of the brood-chamber, fill it with water and let it stand a few days, then see how the water has been blackened. If the black matter gets in the water, will it not get into the honey? It may not be worth while to use queen excluders when working for comb honey but working for extracted is quite another thing. The point is just here: If your queen will stay below of her own accord you don't need any excluder, but if she will not then you had better use an excluder.

It is a prevailing idea among naturalists that insects, such as bees and butterflies, are attracted to special flowers by the colouring of the latter. It has been recorded, as a result of repeated observation, that certain insects prefer red, others yellow flowers, and so on. An experiment just tried in Belgium seems to throw doubt on this. In a garden where a great number of bright dahlias were growing, a number of these were covered all but the very edge of the corolla, and the result watched. It was found that the insects settled as readily on the covered as on the uncovered flowers. The inference drawn from this is that insects are guided in their choice of flowers not by sight but by smell. Conclusions on such a matter should, however, be cautiously drawn; both sight and smell may probably be concerned in the choice, though sometimes the one sense and sometimes the other may be the more active, as circumstances demand. —*Exchange*.



Queens reared in cool weather are often quite dark compared with those reared in hot weather. I have often noticed it. I do not know as the progeny of such queens will be any darker. W. Z. Hutchinson.

A swarm which has settled on a tree-trunk or fence-post should be removed by brushing with a stiff feather upward, not downward, said Herr Jacobs. Otherwise the bees are more apt to become irritated.—*Bee-Keepers' Review*

Salt sprinkled plentifully around and in front of a hive will kill the grass and keep it from growing again. Keep the grass killed for a few inches around each hive and run the lawn mower over the rest of the surface, and we have an ideal foundation for an apiary.—*Bee-Keepers' Review*.

Swallows were a great nuisance in the apiary of Herr Rumler, especially on cloudy days and in the fall, but a dead swallow on a pole stopped their visits effectually. There seems to be no doubt that they destroy workers as well as drones, though they apparently prefer the latter.—*Bienen-Vater*.

J. N., Saumarez, Dumaresq The A. B. B. still commands the interest it always has had for me. I have found the many hints it has given from time to time most helpful, and especially appreciate the column of the questions for the month. But each page engages ones attention, and not the least beneficial are the clippings from the various bee journals. You have my best wishes for success, and my endeavours also to swell your list of subscribers, for I think that no beekeeper worthy of the name can afford to be out of touch with the beekeeping world by neglecting to take such a paper as a *Bee Bulletin*. The prospects for the ensuing season are most encouraging.

THE "DIVIDER"—A NEW DEVICE.—Mr. S. T. Pettit of Canada, in *Gleanings* for Jan. 15, says;—Often to our sorrow we find that the outside of the outside sections in a super, though fairly well filled are, at least, a good many of them, but poorly capped. This has often been

a sore trial—so many poorly-finished sections after looking so repeatedly and waiting so long. It always seemed to me that if more room could be furnished, more bees could be present, and that a more uniform and the necessary heat kept up day and night at the outside of the outside sections; then the bees would feel and act like those farther inside, and would go and finish up the job "in a workmanlike manner." But the difficulty would always come up that, if more space was given, it would only be filled with honey in poor shape. At length I conceived the idea of giving two bee-spaces by putting a divider to divide the extra space into two bee-spaces. Following up the idea I set myself at experimenting to test what seemed to me so full of promise. After experimenting with a good many different devices with more or less success I tried the one which is here described, and it has given very good satisfaction indeed. It is simply as follows; A piece of basswood or pine, about a sixth of an inch thick, and just the width and length of a separator is bored as full of 5/16-inch holes as the wood will stand and not split to pieces, and five  $\frac{1}{4}$  inch strips are nailed across it. These are turned outside against the wall of the super, thus forming two bee-spaces instead of one. The bees cluster on the sides of the divider, and pass freely both ways through the holes, and work goes right along in good shape. I tried a few with  $\frac{3}{8}$ -inch holes with satisfactory results. Nothing is gained by giving more than two bee-spaces, Dividers made of slats  $\frac{1}{4}$  inch apart leave the sections ridgy, reminding one of a miniature washboard, and, besides that some brace-combs appear between the sections and divider. I coined the word "divider," or, rather, applied it to the new device. I hope it will do.

A Mr. Dudley, in the *A. B. J.* explains a device for automatically preventing the escape of a queen with a swarm—but which lets her out and in at other times. It may be roughly de-



scribed as a little box, about  $2\frac{1}{2}$  inches square, and as long as the width of the hive. It is applied to the entrance. Cleats under each end raise it a bee space above the alighting-board, and a cleat running lengthwise under the rear of the box stops entrance directly into the hive. The bees pass in and out of the hive, through the box about the middle of the bottom. The bottom of the box is bevelled at the rear, so as to afford a passage into the hive when the box is shoved tight against the front of the hive. Under ordinary circumstances, both workers and queen pass in and out of the hive in this way without any zinc to bother them. The front of the box is composed of a piece of queen-excluding zinc, hung so as to swing a little. When the colony swarms, there are too many bees wanting to come out at once to pass through the slit, and so most of the mass presses against the zinc in front. This pressure operates a catch, which lets a piece of T-tin drop, which closes the slit the whole length. The workers eventually pass out through the zinc; but the queen, being generally with the last half of the swarm, is imprisoned, and the swarm returns after an interval. When the bee-keeper makes his tour of inspection, he sees by the position of the projecting end of the T-tin that that colony has swarmed. He can then do as he pleases with it. This device has been used with success on a few colonies. It is not patented.

**MATERIAL FOR QUILTS FOR BEES.**—Mrs. Axtell, says, in *A. B. J.* :—After years of experience with coverings for bees in winter, I have come to the conclusion that common, coarse sheeting—the coarsest we can get—is cheaper than burlap or duck, as it is much wider and cheaper, and bees will cover either over with propolis in two or three winters, so we need to have a clean one. Then, farther, I go to some one in the nearest village and ask them to let me pick over some of their heavy paper rags, such as old carpets, quilts, pants, coats and vests—these I get by the pound very cheap

(generally one cent) and I fold them and lay on top of them clean cotton cloth, and then if the bees eat through the cloth, or if the cloth is old, and has some holes in it, they do not drag the chaff down among the bees, and I put on enough of such thick quilts to make the bees much warmer than the light chaff. As far as I have time I cut and fit over those old clothes into square quilts, by piecing, sewing, and tacking together, until now we have enough for all our 150 hives. I never put them on the hive without a cotton cloth underneath, because I do not want them covered with propolis; and I do not line them with the new cloth, because when the cloth gets covered with propolis I want a new one, and if the old clothes (unless strong cloth) are laid directly on the frames, bees will tear them to pieces. As soon as the chaff is taken out of the hives, these old clothes and quilts and cotton cloths are laid away, carefully spread out and piled up smooth. If thrown loosely in a pile, when wanted the following season, they are not so quickly put upon the hives, and the sheets stick together with the propolis, and it takes considerable time to pull them out straight. Ever so much time is saved if everything is cared for and kept in readiness to use when wanted. Often, when these old things are taken out they look so useless. I knew of one woman who wanted to burn all such. One is tempted not to carefully save them altogether, and then we have a big time to hunt for them when wanted.

G. M. Doolittle, in *Gleanings*, says :—All observing apiarists know that, as the day of swarming draws near, the queen ceases her prolificness, so as to be able to fly and go with the swarm, so that, when the swarming does occur, the old mother-queen is scarcely larger than a virgin queen. Nature has so ordained things for two reasons, the first of which is that the queen may fly; for if a queen is taken from a colony when she is most prolific in eggs she can not fly at all, as she is so heavy with eggs. The second reason is, that the queen need not be



inconvenienced with an over-accumulation of eggs before there is time for the bees to construct comb in the new home for her to deposit her eggs in; and so we find that all good queens do not become fully prolific again until about a week has elapsed after the new colony has arrived at its new location. During this week comb has been built very rapidly, especially if honey is coming in plentifully from the fields, while the queen has not been able to keep up with the workers; the result of which is that the bees commence to build store comb, which is always of the drone size of cells. This comb is mainly filled with honey the first season (although in many cases some drone brood is found if the bees feel disposed to think of swarming again, or feel disposed to supersede their queen, or the honey-flow slackens somewhat), the main trouble coming by having this store comb filled with drone brood after the bees have consumed the honey from these combs the next spring. Why I said good laying queens, is because some seem to think that no drone comb is built under any circumstances with newly hived swarms, unless the queen is old or beginning to fail. Now if we give a frame of comb or two to a newly hived prime swarm, we make matters doubly worse, in that we furnish a place for the queen to deposit nearly all the eggs she would naturally lay during the first week after hiving, consequently nearly or all the comb built by the bees during this time will be for store comb, or of the drone size of cell, as the queen had furnished for her all the room in which to lay that she needs. In the above we have the reason why bees build drone comb for the majority of bee-keepers. Now, how is such a state of affairs to be avoided? The way I manage is to give the colonies which are to build comb a brood-chamber of only about half the size of the one from which the swarm came, this smaller size being made by contracting the chamber of the new hive to the size I wish, by means of dummies or division-boards, and also giving them a

part of the section or surplus room at the time of hiving them. Where a queen-excluder is used, some of the sections should have in them partly built combs left over from the previous season, and the others supplied with thin comb foundation. Unless the queen-excluder is used, where no comb or foundation is used in the brood-chamber, the queen may go up and deposit eggs in the drawn comb which is in the sections. Preparing the hive in this way gives the bees plenty of room above to store honey, thus not crowding them in the brood-chamber, so that only comb of the worker size is built below, and that only as fast as the prolificness of the queen demands it. As her ability to lay increases, more comb is built; so that, at the end of the season, we have the hive filled with nice worker comb and plenty of section honey. By the above plan three important items are secured—lots of section honey, no drone comb, and a hive full of nice straight worker comb; and as these latter will with careful usage, last nearly a lifetime, it will pay to spend a little time on them while they are being built.

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## PROPOSED F. B. ACT.

J. B. THOMSON, WOLLONGONG.

Dear Sir,—I have read with some interest the various papers discussed at the recent Conference, and was specially struck with the proposed Foul Brood Act, which is, in my opinion and many others in this district, a complete farce.

The next thing will be a hen convention for an act to prevent roup or scaly leg. The Act seems to be simply an attempt to crush out the poor unfortunate gin case man, for the special benefit of the intelligent expert party, and this is evident by the remarks passed by those who entered into the discussion. The experts claim that the disease is only a terror to the amateur. If this is so, why an Act? The amateur hasn't asked for one, and the experts according to their own showing don't require it (at



least to fight the disease), so that an Act is absurd on the face of it.

Also the expert claims that the gin case is responsible for all the damage. Granting this, where does the gin case keeper usually get his bees? Why from the bush, at least 90 per cent of them. Yet there is nothing in the proposed act about the inspector hunting round for diseased bee trees, though the disease is as common there as amongst gin cases or bar frame hives.

If an Act is required it should be on the same lines as the Dairies Act and apply only to those who are making their living out of the industry and who are likely to disseminate the disease by sending out infected queen, swarms, &c., to the unfortunate amateur, who is perhaps the goose that lays the golden eggs for a good many experts.

Would it not be better if some of the aforesaid experts would endeavour to find out the cause, or a cure for the disease, than waste the time of Parliament over such frivolous matters?

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W. B., Stroud Villa, Boulevard :—I have lost all my bees through the Foul Brood and it has cleared me out, but I still like your book to read as it pleases me and gives me some good reading.

J. G. C., Kangarilla, S. A. :—With the greatest pleasure once more I send subscription for the *A. B. B.* Bees are fairly strong this spring; my first young swarm came ou on the 20th instant, which is early for this part as the 1st Oct. is about the average time they commenced other seasons. Thanking you for the regular way the *A. B. B.* arrives and wishing you every success.

C. J., Guildford, W. Aus., :—If you have got a cure for Foul Brood or know of any one in the other colonies, will you be kind enough to let me have the cure in full. I tried a remedy but failed. The remedy was this: I got a tank which would hold 100 gallons of water and I put 3 pints of carbolic acid in it and got it boiling, dipped each hive in

it for about two minutes the frames also, and then left them to air for two weeks, and then put foundation in them and shook the bees in them. This was about two months ago and now Foul Brood appears again. My own apiary is perfectly clean, but the one I am manager for is the one which the Foul Brood is in.

Hive the swarm in a fresh hive with starters only, burning the old combs. Four days after repeat this with fresh starters again, again burning the previous starters. Put queen excluders on entrance this time or they will swarm out. Are the hives snug, and are the bees likely to get a chill.

Mr. W. D. Russell, Melbourne, Victoria writes :—Dear *Bee Bulletin*,—I have been silent for some months but still have read with interest my *Bulletin* when it arrived each month. I am sure I will have the sympathy of all those beekeepers who know me personally and also of those who only know me by repute, when I tell you I have just lost my wife after eight months illness. She died of consumption on the 31st August, without pain and with the clearest of testimonies of her acceptance with her Lord. So ended the life of one of the purest women and best wives and mothers that it ever fell to the lot of husband and children to lament. The bee season in Victoria is just opening, but being the off year will only be very moderate at best. I read with much interest all the Convention items both of Victoria and N. S. W., but I fear we must be very much in earnest if we ever get our export trade developed, still we are able if sufficiently in earnest to make our product appreciated among at least the working classes of England, and I don't despair yet of seeing my idea of a local agent especially engaged to place our product in a proper way before them. With very many kind wishes.

Our deepest sympathy goes out to Mr. Russell

S. G. F., Mundarlo, :—If not too much trouble would you kindly answer the following questions : (1) In the ABC Bee Book it says, use carbolic acid crystals diluted 500 times in water for spraying comb, brood, etc. for Foul Brood.



Would it be better to use it stronger for disinfecting hives. (2) Would Calverts No. 5 carbolic acid (fluid) do as well as crystals, and if so, what quantity of water in weight would I use to dilute say one ounce weight of carbolic? As I have only just got a few hives, five in fact, and I found that three of them had foul brood. No. 1, I burnt hive, bees, brood, honey, everything in fact. The other two, I put bees into clean hives, and burnt combs and starved bees 48 hours (as per A B C Bee Book.) If you have a *Bulletin* with Mr. McEvoy's cure for Foul Brood kindly send it.

Re carbolic acid. We cannot give you the information you ask. Try Easton's Soluble Phenol sold by Mr. R. K. Allport, Chuter St. North Sydney. I am forwarding you December number *A. B. B.* containing Mr. McEvoy's method. We believe however, contrary to him, it is the best to disinfect hives. How have you had your bees covered in between the tops of the frames and the cover? Have they been chilled?

J. S., Dubbo, Sep. 15th:—Just a few lines to let you know how we are getting along in the bee line. Well, as spring is setting in again and every prospect of a splendid honey season, I have been taking a glance through the bees to see how they were progressing, but to my great disappointment they have nearly all disappeared, through what I believe is spring dwindling. Out of one hundred and thirty colonies there are left only about twenty five that are worth calling swarms. The winter was very changeable towards the end, which brought about the loss. Those that are left seem to be doing fairly well. They have ceased dying as fast as they were thanks to the warm weather. I had five colonies that wintered in single boxes that came through better than any, as they were small swarms when they were fixed up for winter, so I really think there is something in keeping them in as close quarters as possible during winter. I am forwarding a few of the dead bees, perhaps you can kindly tell me if it is spring dwindling, or some other disease they may have had, as they all had ample stores for a winter as long as two like we had. Wishing you a most prosperous season.

We have no doubt your bees died from want of proper care last fall of the year. They should have been confined to as small a space as possible, and good blankets or moisture absorbing material placed on them to keep them snug.

J. E. P., Guildford, Victoria:—I have not had any honey for two seasons from my few hives (6 at present.) I was fortunate to have some frames of honey by me for last winter and I saved about six colonies. But several around here lost all they had. They only use ordinary boxes such as kerosene or gin case, one neighbour saved two or three out of 60 or 70 cases. Last season I thought would be good, but the bees could only well fill up the frames, I put on sections but they could not get enough to fill many, so I decided to leave them all they had to help them out of this past winter hoping to have some good swarms soon, also a good honey flow this summer. We have had splendid rains lately here, that will no doubt help the honey plants. I don't know any person who has as many hives as I have within the district. Do you know if it would be wise to use frames that have been used, partly filled with honey early in season, and emptied by the bees and discoloured. Several frames I have on hand are well filled with combs that has never had any honey in, owing to them leaving the colony or the supply running short. Have you tried to keep the ants away from the hives by putting short posts in the ground and placing kerosene tins on them so that the tins are not many inches from the ground, that is supposing you use a frame for one or more hives. I have been informed they will go up the post and come down the tin (inside) and instead of going up on the outside to get to the hive, they will fall to the ground again. I am troubled with the very small ants, and use kerosene tins cut about 8 or 9 inches high, and place the legs of the stand in them filled with water. The tins must rest on a smooth surface much larger than the leg of the stand, they will last for a long time if painted inside.

Your plan might do, but it would be a deal of trouble in the large apiary. Try tying fur round the legs. There would be no harm in using the frames you speak of.



**TRANSFERRING.**

Those who have been keeping hives in boxes and wish to transfer to bar frame hives may do so in several ways. Transferring should be done early in the season when there are not many bees or much honey in the hive, and at a time of day when the field bees are flying. We have transferred them successfully by the following plan. Get a level board or a flat cover, and a number of strings or tapes long enough to go over a frame from top to bottom and tie at top--or stiff wires so bent that they hitch together at top, but strings or tapes are generally more handy. Remove the box hive a short distance in front of its stand, working gently, and place upside down on a table so that you can work comfortably. Place bar frame hive on old stand. Smoke well. With a hammer and chisel remove one side. Smoke there so as to drive the bees into the other parts, and with a sharp knife begin cutting out the comb. Place a frame on the aforesaid board with the strings or tapes across underneath frame. As each piece of comb is cut out of the box hive fix them in this frame, then draw the strings or tape lying underneath over and tie at the top--say three to a frame--and as fast as they are fastened place frame thus filled in the new hive placed on the old stand, and so proceed, filling frame after frame till all the comb is cut out and placed in new hive, cutting the comb so as to fill the frames. The flying bees will quickly gather round, and as you proceed cutting out, only the young nurse bees will be left in the old hive, who are very easily kept under by smoke. Be careful with the brood, to place it in the middle of the new hive. When all the comb is removed, shake the remaining bees in front of the new hive. In a few days the different pieces of comb will be all joined neatly by the bees, who will also start gnawing and tearing the pieces of tape or string away, but that labour may be saved them by the apiarist--using his judgment as the pieces of comb are joined by the bees--taking them away himself.

**A SWARM OF BEES IN MORT'S DOCK, BALMAIN.**

R. H. LONG.

When going to dinner at noon today, and in walking round head of the large Dry Dock at the Mort's Dock and Engineering Co's. works, I saw a swarm of bees clustering on an embankment within a few feet of the edge of the Dock.

All thoughts of dinner fled, and I fled too, "for a box," managed to secure one and returned to the scene of action.

The swarm of bees had clustered on the end of an old rail that lay among the grass on the edge of embankment, which was a couple of feet above my head, so that I had to hold the box at arms length over them.

I could not shake or brush them as they were too scattered among the grass. A few bees ran up the sides of the box, and I got a bystander to give them a puff or two of smoke, but without much effect.

The men were now beginning to return to work, and I and the bees soon became the centre of attraction to another swarm of "workers" whose remarks soon began to fly round. I never felt so well versed in bee lore as I did when their crude ideas began to be expressed. Most of them seemed to have a fair idea of the importance of the queen, but their knowledge in general was very hazy. One was very positive in assuring me that the queen had no wings and was "blue" and when I asked him how she followed the swarm, he said the other bees carried her?

Some seemed anxious for me to "call the bees," which they said was done by rapping on the box.

It was not very cheering to hear such remarks as, "He'll never get them," "He's doing it all wrong," and one fellow seemed disgusted with the whole concern and said that they were not bees at all, but only flies, because "Bees" he said "had honey, but those things haven't any honey, so how could they be bees."

All this time I had been trying to



induce the bees to cluster in box, and my arms were fairly aching with holding it up, but in smoking some bees from a tuft of grass the mystery of their immovability was explained.

It appeared that there was a large hollow under the old rail they had clustered on, and which I had not seen on account of the grass and clustering bees.

I at once took in the situation. The queen and about half the swarm had retreated into the hollow in the ground.

My plans were soon decided, with my free hand I scraped away all grass and earth clear round to the back of cluster and then got a piece of oily waste alight which I placed right round at the back of cluster and stopped up all openings with earth, and soon had the satisfaction of seeing the bees driven out of their retreat and cluster on the sides of the box.

After they had all settled, I tied a cloth over bottom of box and marched them home in triumph, where they are now snugly tucked away on one frame of unsealed brood and three sheets of foundation. From what I can ascertain this is the only swarm taken from the Dock. I have since been wondering what could have induced them to choose the Dock, of all places, as a location. Could it be that they wanted to try the eight hours system, or had some idea of teaching us mechanics a lesson in industry? Perhaps some of your readers may hit on some explanation of such a queer choice of a site.

Hoping this account of swarm catching may interest you.

## HONEY.

### I.—ITS VALUE (Continued.)

HARRY H. DAVEY, MELBOURNE.

In the preceding paper I spoke about the relative value of honey in contrast to other saccharine matters. In this I intend to enquire a little into the value of Australian Honeys from gum and box trees, &c.

They are certainly very different in character to any others, and a taste, a smell, will reveal at once some special and marked difference which

arises and must arise from the active principle of its source; for it is the character of the tree that characterises the honey; and the question is—are such qualities of any special value? I say, yes! you make the value if you create the demand for it (and to pave the way to my next paper on *Its Market*, I say also that you create the demand by mothering your own market, and you kill the demand and the value by allowing middlemen to ring it, and dealers to adulterate.)

But in our Australian honeys an analysis would give—

- (1) Vegetable acids.
- (2) Colouring material and mineral matters.
- (3) And a slight percentage of volatile oil (and which is in all honeys as a perfume from and identical to the flowers derived from.)

And whence are these colours, flavours and perfumes from but from the eucalyptus, gum and box trees, &c., each according to the strength of its active principle, for all trees and herbs have each their active principle or character (so to speak) which is in the tissue through and through it (and specially in the flower, fruit and seeds, because all the strength of the tree is needed there, and all its sweetness.)

The A.B.C. of the Eucalyptus tree then is—

1. That it is not its special property, for all trees, herbs and vegetables have oil in their tissues.
2. That *Eucalyptol* is the active principle, even as *Menthol* is the active principle of the peppermint plant, besides which there are gallic acids and tannic acids and other properties closely allied in the wood spirit.
3. That *Eucalyptol* (even as *Menthol*) is a crystal.
4. That *Eucalyptol* is from astringent to sub-acid in flavour, and permeates the leaves, flowers and seeds out as health into the air we breathe.
5. That *Eucalyptol* and the other parts of the wood spirit are specially absorbed and held by the oil of the tree (even as menthol is specially absorbed by the oil in the tissues of the peppermint plant.)

So that these crystals, &c., are not oils, but are in the oils, even as elsewhere in the herb or tree.

These to my mind are self-evident facts—the A.B.C.—and what can be more evident than that *Eucalyptol* is not *eucalyptus* oil, nor *Menthol* oil of peppermint, that these are merely in the oil somewhat like they are in the other parts of the plant. *Eucalyptol* and oil are, thus, not one and the same, but separable. There is *eucalyptol* (the very essential of the tree), and *eucalyptus* oil containing a very great strength of that essential part of the tree.

We need to be careful in distinguishing the various substances or we get sadly mixed.



And then, again, what can be more evident as an outcome of that than this—

That the nectar does not get its flavour nor quality from the oil, but from that which *flavours and qualifies the oil itself*, from those *crystals and acids in the wood spirit of the tree or herb*;—and will not *oil-colours perfumes and flavours agree with honey-colours, perfumes and flavours*, each from the same tree? And are not the darker oils and the darker honies from the same tree? And are not the darker oils and the darker honies the strongest perfumed and strongest flavoured? And are they not from what we might call the *strongest tree in eucalyptol, acids and tannin*? I myself have noticed the close resemblance of some of the strong *ant-like perfumed* honies to eucalypt tannic and gallic acids.

I do not place all the latter in the A.B.C. of self-evident facts, but they are very suggestive, if not evident.

As to perfume; what is the law?

The flowers are the bridal chambers of the tree, and to them fly all the sweetness and perfume to attract.

Odour is conveyed by oil that flies off from the flower into the air surrounding; odour is in the oil—volatile, flying.

The odour of *Otto of Roses* is the active principle of the rose, conveyed by the oil or set free and given off by the oil in the chambers of the flower; so the odour of peppermint; so the odour of eucalyptus.

From the tissues the oil exudes through oil ducts out into the opening flower, and from thence as a *perfumed breath within the air*. And at the same time the sugar of the tissues also exudes through sugar ducts into the opening flower, and thus *perfume and sweetness* (oil and sugar) *combine* in her to attract the male in the shape of pollen adhering to a bee or butterfly.

Odour.—Break the stalk of peppermint, lavender or tomato plant; rub a gum leaf or a gum tree blossom or a pepper tree leaf between your hands, and you instantly find out the odour of their active principle, conveyed to your sense of smell by the oil you have bruised from its cells; and (as the strength of a plant or tree flies to its flowers and seed pods), does not the nectar of the flower have *somewhat* the same odour, flavour and colour as the oil? These are of the tree.

As to Eucalyptus oil itself in eucalyptus gum tree honey, I say, there can be no more than enough to give the perfume to honey—in unripened honey very much, in ripened honey just that amount that a liquid will retain and must retain. It is said oil and water won't mix, yet, before one can distil oil from any material, the water itself must become charged with oil, or it could not pass in the steam.

Then if water cannot help taking up some oil, how can nectar help taking up a certain amount of oil also? It must be bound to the same laws at least, and I feel sure that the

so-called *stink* of unripe gum-tree honey is due to the oil of the flower buds much more than we think. Ripening evaporates moisture, and volatilises the excess of oil, and the so-called *stink* of green honey—don't forget—is just the smell of gum tree bottled up awhile and then let loose (in the English market.)

But, as I have said, there is no eucalyptus oil to speak about in *ripened honies*, only that very small percentage that gives the perfume of the tree derived from (and also, as I have said, perfume proves oil to be there.)

Peppermint, clover, dandelion, horehound, gum tree, or orange tree honies, are told by their *flavour and perfume* anywhere. *The difference is in the blood*, and that blood (so to speak) is in the honey, and though perfume may rest with the oil, yet flavour and colour have to do with some other part of that "blood," with the eucalyptol itself, or with gallic and tannic acids.

I think honey has a little of all the tree's properties—eucalyptol, gallic and tannic acids are mixed up in the one *identity*; and that one identity is in all its pollen and seeds, and cannot we, even by its honey, vividly identify the tree.

At last it is correct to say the tree *flavours, colours, perfumes* its honies and oils.

And as Mr. Jones truly said—"Your honey has a peculiar (a distinct) flavour of its own, and as it is gathered from the eucalyptus, gum or box trees, the flavour is known as "eucalyptus" in the market. It is *eucalyptus gum-tree honey*."

Such are the parts and such is the value of our Australian honies.

#### These Trees—

*Their breath is health in the air we breathe.*

In my next and last paper I will deal with II. Our Honey: Its Market, &c. I feel sure a large demand can be made if we will only mother the market for ourselves, instead of letting the middlemen mother it for themselves. We must call our honies exactly what they are; and show the public what prime garden honey really is, and they will very soon know that forest tree honey is not wild stuff, but fine garden honey.

Co-operation and plain out-and-out dealing are urgently needed.

And to be plain, for instance, call red gum honey *red gum tree honey*; and yellow box yellow box tree honey. Drop the *eucalyptus*—let them make that themselves, and take my word there will be an awakening.

To be continued.





**INVERELL B. K. A.**

The annual meeting of the Inverell Beekeepers' Association was held at the School of Arts on Thursday, 8th instant. The following members were present:—Messrs J. W. Moore (President, in the chair), T. Mather, B. Pennington, J. Brown, H. Jenkins, F. W. Penberthy, R. Croper, J. Pennington, A. Piggott, and G. H. Arkinstall, Secretary.

The minutes of previous meeting were confirmed on the motion of Mr. B. Pennington, seconded by Mr. Mather.

The annual report and balance sheet were read and adopted on the motion of Mr. Mather, seconded by Mr. Penberthy.

The chairman said he would not detain the meeting with any general remarks, as there was a lot of business to be done. He signified his intention of giving, at a later date, an address on the benefits to be derived from co-operation.

The following officers and committee were then appointed for the current year. President, Mr. F. W. Penberthy; vice-presidents, Messrs T. Mather, B. Pennington, and Dr. Lane; secretary, Mr. G. H. Arkinstall; treasurer, Mr. J. W. Moore; general committee, Messrs. J. Pennington, A. Piggott, J. Brown, W. Chisholm, R. Croper.

A general discussion on bee topics took place. Mr. Mather, as one of the Revision Committee of the P. and A. Association, called attention to the prize-list that had been adopted for next show, as an inducement to the advancement of apiculture.

One new member was elected, viz., Mr. W. H. Hughes, of Bonshaw.

The secretary was instructed to procure two periodicals for the benefit of members.

Questions for discussion at next meeting were tabled, viz. 1. Which is the better hive for our district—the 8 or 10 frame Langstroth? 2. Which is the best material for quilts for hives?

The secretary was instructed to write to the Committee of the School of Arts, thanking them for the use of the room, and also to hand to the institution a donation of 10s.

The meeting then terminated, and the next meeting was fixed for 4th proximo.

The following annual report referred to above.—“Gentlemen—Your committee, in presenting to you their first annual report for the past year, must congratulate you on the progress the Association has made since its inauguration. There have been eight meetings held (only one lapsing) at which the attendance of members has been well maintained and a lively interest kept up, as evinced by the number of questions debated at the meetings. At the Inverell P. and A. meeting the apicultural display was much admired, the prizes being well divided amongst your members. Your committee are pleased to note the almost entire absence of disease of any kind in the district, a few cases of bee paralysis being the only ones reported.

The past season has been a favourable one, the honey crop for the district being approximately 24 tons—a decided increase on the previous year. The outlook for the coming season seems to point to an abundant harvest, with the bees fully six weeks in advance of last season. The balance sheet, we are pleased to say, shows a credit balance of 13s 8d. The Association has, we are pleased to say, affiliated with the National Beekeepers' Association, who are now trying to make arrangements with the South Coast and Camden Cooperative Company, to pass all honey produced by its members through the one channel, so as to better control the supply, and maintain a fair price for our products—a step in the right direction. In conclusion, we hope the same interest will be evinced in the Association for the coming year, as in the past.—Yours etc., J. W. MOORE, Chairman of Committee.

J. J. B., Port Macquarie, :—I treated a case of “fertile workers” last season successfully just through a hint I got in *A. B. B.*, on entirely another matter, but which met my case when applied.



## QUESTIONS.

J. A. H.

125.—Will it cause Foul Brood if comb is given to bees with dead larvae in it which died after spring dwindling.

126.—H. E. B. Thalgarrah.—I make "honey toffee." I find shortly after it is made, it commences to turn soft and sticky; there is some way of preventing this, can any of your correspondents inform me. I have seen this toffee in the shop in Sydney quite dry and brittle, so that there must be some chemical or ingredient used to prevent this return to what is almost very thick honey. I find that toffee made with sugar and butter also gets damp and sticky if kept, but not to the same extent as that made with the honey.

W. NIVEN.

125.—I have used such combs many times, and have seen no disease from them.

126.—Cannot say, do not know.

THE DRONE.

117.—Protection does not raise the price of either honey or wax, but it raises the price of glass jars, tinware, machinery, clothes, timber, and every other requisite for the beekeeper. Honey and wax are natural products, the others are "fostered industries" so-called.

B. NAVEAU.

125.—Provided there are no Foul Brood germs in the combs the dead larvae of itself will not cause Foul Brood. If however the Spring Dwindling has been brought about by Foul Brood, it is quite another thing.

126.—This is a trade secret and I would advise that our friend apply to a confectioner. But of course I could not say that he would get exactly the thing required.

E. J. RIEN.

125. No.

126. Yes. To answer this question fully would take too much space, and perhaps be uninteresting to beekeepers. If H.E.B. or any other brother beekeeper who has the same difficulty send me their recipe, enclosing three stamps for reply, I will show them where they are wrong, or should they call would be glad to help them in this matter gratis. It is just a "trade secret."

AUSTRALIAN YANKEE.

120. See next month's "Crumbs."

121. I produce extracted only, and pack in 4lb. tins.

122. No, sir.

123. Keep the tariff up and encourage local industry.

124. Ligurian ahead every time.

125. No.

126. This is just what I want to know.

W. S. PLEFFER.

118.—It may be only a fad, but still I fancy naphthaline balls help keep Foul Brood away. I have kept them in my hives for twelve months and intend giving them another year's trial. Being very volatile, they will not injure honey.

121.—Lever top tins are the best and cheapest for extracted honey. 4, 7, 14, 28, and 60lbs.

124.—I have only had two years experience with goldens, and found them the best honey gatherers, but great stingers, and more subject to paralysis than the leather banded ones. Last season was a very good one for honey and as no two years are exactly alike it requires a number of years to test which is the best bee for any particular district.

LOYALSTONE.

125.—It would be a very risky thing to give a colony any old comb with young larvae that is dead in it. This is one of the causes of Foul Brood in my opinion. How would J. A. H. like to have a number of bodies of dead people that had been dead some time, brought into his house and be compelled to live with them in his house. I reckon he would catch a disease of some kind. Just the same with bees or anything else. If you put such old combs into any colony, expect a disease of some kind. But such a thing has been done and no ill effects, but it is not worth the risk. Far better to melt down such old combs and turn it into foundation.

126.—No experience, but have heard it said it requires an expert to make good honey or any other kind of toffee. Any one can make toffee of a kind.

WORKER BEE.

118.—No experience.

119.—No experience.

120.—Hive the prime swarm on old stand and move the parent stock to a new position making sure the bees destroy all queen cells after the first one hatches, which they usually do.

121.—I use the kerosene tin, the 28lb tin neatly labelled and the honey well ripened. Can get rid of mine readily, packed thus. No experience in comb honey.

122.—Never made such a minute inspection but should think a drone was a drone all the world over.

123.—Rather increase it. Let us employ our local mechanics who are quite able to turn out as good an article as the imported and as cheap, who spend the money they earn in our country thus keeping it in circulation here. We won't benefit our country by sending our money to foreign lands, and if the tariff is reduced who will get the benefit of it? Not the beekeeper, but the importer.

124.—No experience.



**QUESTION NEXT MONTH.****THE DRONE.**

127.—Is the laying power of the queen with reference to drones and workers, automatic, or can she lay either a drone egg or a worker egg at will.

**WORKER BEE.**

128.—Can any beekeepers give their experience with the foundation wax press.

129.—What number of hives can one man look after, using the Standard hive and simplicity frame in a moderate season.

**A. J. ROBERTS.**

130.—Will zinc lined cases do for keeping honey in?

**E. T. JOHNSON.**

131.—What is the best thing N. S. W. beekeepers can do to raise the present low price of honey?

**E. E. BUTTSWORTH.**

132.—When a person comes across a swarm (settled) in the bush, is it an indication that the tree (nest) which they came out of is near?

133.—A beekeeper has been summoned for trespassing on private property whilst he was following a swarm of bees which had issued from one of his hives. Is there any case on record similar to this, if so could you let me know the Court's decision?

**SWARMING.**

We suppose the greatest trouble to beekeepers at the present time is swarming. For that reason we presume it will not be out of place to relate a few of our own swarming experiences. When our apiary was in town, and on the roof of the house we had some funny experiences principally caused by our then buying black swarms from the bush, with the intention of as soon as possible Italianising them. It was in the intervals between, such trouble would occur. Perhaps the second or third day after we had hived them, and of course always at a time when we were most busy in our printing office. It was a very busy

thoroughfare, the main street, and in about the busiest part of it. Our first experience was after a little trouble—carrying a bucket of water and sprinkling them with a Cogshall bee brush for some half hour—they finally settled on the back axletree of a buggy, the owner of which was making purchases in an adjoining shop. Calling him out to hold the horse's head we captured them without any trouble, putting their new house immediately underneath vehicle. On another occasion, after the swarm had paralysed traffic for a time, we placed an empty oil drum in the centre of the road and inserted in the bung hole a branch of a peach tree. They clustered round it almost immediately. A shed in which several cabinetmakers were working, some empty cases being on top, one of the cases became the swarming point, necessitating some rough roof climbing to get them home again. A local draper had for a sign a large tin hat, some six feet high, on a rod about eight feet long over the front of his shop, about 14 feet from the ground. The previous day we had bought and transferred to frame hives two black swarms. All was apparently right. About twelve o'clock on a hot melting day, while busy in the office with customers, and giving directions to workmen, there was a cry, "The bees are swarming." Hastily rushing to see which hive it was, and taking an empty hive with a little larvae in comb, we went into the front street, to find the usual state of commotion. Fortunately the town overseer was at hand superintending the watering of the streets. A little hose application soon brought them down, no doubt however drowning many. That settled, we resumed our business again. Had hardly done so, when again the cry arose, "Bees swarming?" We won't repeat what we said, but out we rushed again, to find it was the other black scoundrels had taken a fly out. No corporation waterman was at hand now, and after trying various experiments, they at last settled on the aforesaid tin hat. The rod that held it was



to our thinking to ancient to lean a ladder against, so we borrowed a ladder to place against the house, on which we sent a lad with a clothes prop. Then we got a step ladder on which we ourselves mounted with the hive held as high above our head as we could reach, to find it was six or seven feet below the hat. To be cool in the office our sleeves were tucked up. In the hurry we had not unrolled them. The lad was told to hit the hat with the clothes-prop. We felt there was a goodly crowd looking on, and cabs, busses, and other vehicles were all swerving out of the way. Down came the bees into hive, and over our head and arms. We believed we got a few stings but would not flinch before the audience on the pavements around. Our arms we afterwards found well pasted with stings. Brought the box to the ground and waited to see them settle. But, Oh, dear! they went up again. The operation had to be repeated, with the same result. They were determined to settle on that tin hat. We fixed them up though. Soaked a sheet in water and fixed over the hat with the clothes prop. They then made for a garden rear of a house opposite, where we soon captured them. At an out apiary a hedge some ten feet high saved a lot of trouble securing swarms. At our present apiary though we take all possible care by clipping queens, still there are times when they will come out through our not being able to give all the attention we would like. There are only tall trees around and some dead timber on the ground. One swarm settled on a dead log on the ground, being easily captured. If they go to a high tree, and the ladder and swarm catcher together is not enough a ball of string with stone one end and a rope at the other, does the work, the stone being thrown, draws the string, which draws the rope over the branch, till with the two ends of the rope, the branch is shaken and the bees fall into the hive with starters and frame of larvae placed on the ground below. After

our house was built, the builder left on the ground a tressel about eight feet high, which he had put together to help him in the building. It was in the way but it occurred to us it might be useful if placed in the centre of the hives. We placed it there, and half an hour after a swarm came out and settled on it, and since then nearly every swarm that has issued has done the same thing. When a swarm issues our first move is to ascertain the hive it came from. Stoop down and endeavour to secure the queen. If an old one and her wings are clipped this is easily done, as she is generally found near the entrance with a cluster of bees round her. Place her in a queen cage. The swarm missing her will soon return. Then procure a hive in which place a few combs or starters, go to a strong hive and procure a frame with larvae on it and place in same. Remove old hive to a new place. Then placing hive with swarm in its place. Should the queen not be clipped, or a virgin queen issuing, take a hive containing one or two combs or starters, and one with larvae, go for swarm to where it has clustered. When you have secured it, and the bees are somewhat settled down, place in old position, and as before, remove old hive to a new stand. Swarms do not generally go far when first clustering. If they are however, not captured then, they often go a very long way before again clustering. The removed bees, have perhaps several queen cells, but now being deprived of the field workers (who go to the old stand) are less inclined to swarm than if left on the old stand, and the first queen that emerges from the cells generally destroys the other cells, and thus saves issuing of several swarms, leaving you with two strong colonies, instead of a number of weak ones. Should you not happen to be at hand when an old queen whose wing is clipped swarms, not being able to fly she often gets lost, when the swarm returns, and they again emerge when the first queen emerges from her cell. When such happens, perhaps several



queens may emerge together, and so swarms have been observed containing as many as six queens. We suppose when they find their new home, a royal battle settles which of the lot shall live and reign. Should you wish to increase your apiary, these queens are the very best, all may be caged for use in nuclei. If able to secure them before they leave their cells, placed in West's cell protectors they can be put in hives whose queens you would like to supersede, or a nuclei may be formed by taking frames of brood with adhering bees from several different hives, and placing in a new hive, the queen cell in its protector being fixed in one of them. As virgin queens mate when some three or four days old, we always see the hive has larvae, or else the lot may swarm out with her and look for a new home. Eggs or capped brood will not have the same effect in keeping them to the hives as the larvae.

### PRICES OF HONEY.

SYDNEY MORNING HERALD.—Honey is plentiful, slow sales. Garden honey, choice 2½d; Second-class quality 2d per lb.; Beeswax choice 1/- per lb.

AUSTRALASIAN AND LEADER, MELBOURNE.—Honey 4d to 6d per lb. Messrs McClurey Valentine & Co., Melbourne—Honey 3½d per lb.; Beeswax 1/1 to 11½d per lb. Barrow & Co., Melbourne—Prime clear garden Honey 3d to 3½d; Congealed from 2d to 2½d; Beeswax wanted from 11½d to 1/-, any quantity.

GARDEN AND FIELD, Adelaide.—Honey has ready sale, 2½d to 3d per lb.

(At a late meeting of the N. B. K. A. Committee a resolution was passed to request the daily papers to discard the word *Garden* for *Extracted*.)

SAN FRANCISCO.—Honey—Fancy white, 10; No. 1 white, 9; fancy amber, 7; No. 1 amber, 9; fancy dark, 5; No. 1 dark, 4@5; extracted white, 5; amber, 4; dark, 2½@3. Beeswax, 24 @25. Demand not active for honey or wax. New honey of fine quality. [2 cents make one penny.]

The same journal says:—"While adulterated honey may not be for sale in San Francisco, the fact remains that it is being packed and shipped in as great a quantity as ever."—*Pacific Bee Journal*.

J. S., Eugowra:—Beekeeping about here is worse than nothing. This long drought has killed most of our honey bearing scrub in the hills around. There is a bad out look for us this season again, we have had three in succession and I think this will finish us up altogether.

G. F. B., Wellington:—I think that if the beekeepers was to give say two or three shillings each, and get some good lawyer in Sydney to test a case of adulteration of honey in the Law Courts, and then urge our members to help us to get a bill passed. I think that all beekeepers that have over ten colonies should pay a small amount towards getting this bill passed, and then we can easily get 3d. per lb for our honey in Sydney. There is always trouble in getting bills passed. But if we test the law and then we may get the Ministry to move in the matter. Bees are swarming in all directions, and every prospect of a good season.

J. W. I., Sofala:—About 9 or 10 weeks ago I was master of a fine little apiary, close on 100 colonies, but spring dwindling commenced and I have had it to perfection. I have only five nuclei left, and two of them are so weak they have killed their queens. By what I hear not that I know for certain, I am not the only one that has suffered. I have not sold all my last year's crop of honey yet, and am gathering every shilling I can get to buy a few more bees.

Is it spring dwindling or spiders? Look well under your bottom board.

C. E. Buttsworth, Cessnock, 4th October:—Bees are doing very well and if the weather is favourable we ought to have a good harvest this year, as a great many different trees are in bud. I secured a fine swarm for a neighbour a fortnight ago. It filled a Munday hive. Of course I know that when a swarm issues from a hive that they nearly always settle within a short distance of their old home, but I have never found a "bees nest" near a swarm that I have found in the bush.



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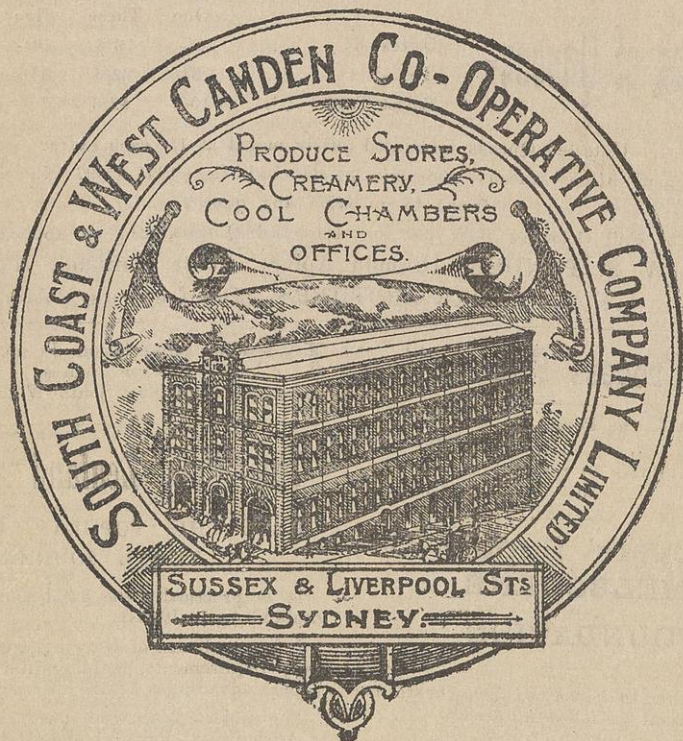
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Sir,—The breeder queen that I got from you last year has turned out a real beauty. Her colony swarmed last October, the swarm weighing 6lb: this swarm without any help or fussing about gave me 601lbs of extracted honey, while the parent colony gave 400lb of honey. Both colonies are now in the best of condition with plenty of stores for winter.

Yours truly,  
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WALCHA, 7/9/97.—The 18 Untested Queens I received from you all turned out splendid. I have raised 20 nice young Queens from them. Please send six more.—A. MONTIETH.

KARS SPRINGS, 9/10/97.—The Queens I got from you are A1. I got two from another breeder last season and gave big prices for them, but they are not to be compared. Yours have beaten them hollow, although introduced later and into smaller swarms.—J. GOODWORTH.

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