



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The Australian bee bulletin. Vol. 13, no. 4 July 29, 1904

West Maitland, N.S.W.: E. Tipper, July 29, 1904

<https://digital.library.wisc.edu/1711.dl/VECNQOG43FDOL8H>

<http://rightsstatements.org/vocab/NKC/1.0/>

For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

Registered at the General Post Office Sydney, for transmission by post as a Newspaper

THE AUSTRALIAN Bee Bulletin.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

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

Circulated in all the Australian Colonies, New Zealand, & Cape of Good Hope.

VOL. 13. No 4.

JULY 29, 1904.

PER COPY, 6D

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



YOUR HONEY WILL SELL BETTER

In Well Made **LEVER TOP TINS**
That do not Leak.

WHICH CAN BE OBTAINED FROM

Chown Bros. and Mulholland, Ltd.

THOMAS STREET, ULTIMO, SYDNEY.

PRICE LIST ON APPLICATION.

✧ R. K. ALLPORT, ✧

4 O'CONNELL STREET, SYDNEY.

BUYER OF HONEY & BEESWAX.

YOUR OWN WAX MADE INTO
FOUNDATION AT 5d PER LB.

I quote you a nett Price for your Honey and Beeswax delivered at Darling Harbour or Sydney Wharf. No uncertainty as to what price you will get, but a **straight out offer for cash.** No charge for Cartage, Commission, Advertisements, &c. **Send Samples.**

W. L. DAVEY,

STATION STREET,

FAIRFIELD, VICTORIA.

CAN SELL TO BEEKEEPERS ALMOST ANYTHING.

— **Try Him For** —

HONEY TINS, GLASS HONEY JARS, RUBEROID,
NAPHTHALINE, HONEY TANKS, PIANOS (£30 to £200).

Can Sell for Beekeepers :

HONEY, BEESWAX. Can also place a line of 50 BALES
OF RABBIT SKINS, (must be good). Send Samples.

N. S. W. BEE-FARMERS'

ASSOCIATION.

OFFICERS:—

President :

HASSELL HALL, M. A.

Vice-Presidents :

F. W. PENBERTHY, T. BRADLEY.

J. F. DONNELLY.

Secretary & Treasurer.

E. TIPPER, J.P., WILLOW TREE.

Committee :

MESSRS. E. J. RIEN, J. PENNINGTON, F.
BOLTON, J. R. W. GAGGIN, E. DOWLING,
J. R. IRVINE, J. ANDERSON, W. GEE, P.
RIDDELL, W. E. BAGOT, W. NIVEN,
— BUSHELL, W. AGER, LATIMORE, HEWITT.

RULES & OBJECTS.

1. The careful watching of the interests of the industry.
2. To arrange for combined action in exporting honey to relieve local glut when necessary.

3. To advise members as to suitable localities for establishing apiaries.

4. Any beekeeper can become a member on approval of committee, subscription 2/6 per annum.

5. That every member with more than 50 hives shall be allowed an extra vote for every additional 50 effective hives.

6. No member be eligible for office who has less than 50 effective hives, or his subscription is in arrear.

7. The Association to consist of a central body and district branches affiliated with it.

8. The principal officers be such as will undertake to meet each other in committee at least once in twelve months.

9. The officers shall consist of President, Vice-President, Treasurer and Secretary, and Executive Committee.

10. After the first election of officers, arrangements to be made by the Secretary to call for nominations for office-bearers, and issue ballot papers prior to the next annual meeting.

11. Supply dealers or commission agents cannot become members.

12. Members unable to attend meetings or conventions can authorise or nominate any member they know will be present to vote for them on any subject brought forward. Such vote or votes to be in addition to the member's present own vote.

JULY 29, 1904.

The Australian Bee Bulletin

SEND YOUR VOLUMES



—OF—

A. B. B.

—TO US—

For **BINDING.**

 **Post Paid for 3/6.**

The Farmer & Grazier

The Best Illustrated
Farmers' Journal in Australia.
7s 6d PER ANNUM.

J. TWOMEY & CO.,
76 PITT STREET,
SYDNEY.

NOTICE.

SHOULD any beekeeper have a doubt of the genuineness of any honey sold in his neighbourhood, send a sample to the Chairman Board of Health, Sydney, who will cause it to be analysed, and take proceedings if necessary.

You cannot do better than get your Printing done at the "Bee Bulletin" Printing Office. Honey Labels a specialty.

TO BEEKEEPERS.

FOR HIGHEST PRICES and PROMPT RETURNS CONSIGN YOUR HONEY, WAX, Etc to

P. J. Moy & Co.,

161 SUSSEX-STREET,
SYDNEY.

WESTERN AUSTRALIA.

MR. J. B. KLINE, Guildford, SADDLER and HARNESS MAKER, and Secretary of the Western Australian Beekeepers' Association, is Agent for the "A. BEE BULLETIN," and is authorised to receive Subscriptions and Advertisements for same.

E. TIPPER,

"A. BEE BULLETIN."

HONEY LABELS




Our facilities for doing all kinds of Honey-label work in one or more colors are the best and we do it cheaply.

A. B. BULLETIN.

 **Have you seen the last copy**


of Martin's "Home & Farm."

If not, SEND FOR SPECIMEN COPY!

 **SUBSCRIPTION Only 2/6 a year in N.S.W. Other Colonies 3/.**

You Should Read It!

It is for every Farmer, Orchardist, Gardener, Maize Grower, Dalryman, Stock Breeder, Poultry Keeper, Bee Keeper, Country and Suburban Resident.

 **The Paper for every Farm and every Home throughout Australia.**

"Home & Farm" Publishing Coy., 161 Clarence St., Sydney, N.S.W.

The New Zealand Farmer.

READ THIS POPULAR AGRICULTURAL JOURNAL.

It is practically the hand book of the New Zealand Agriculturist.

It keeps abreast of every enterprising farmer's daily requirements, enabling him to utilise all modern advantages within his reach.

The subjects dealt with cover the whole field of Agricultural, Pastoral, and Horticultural pursuits, and the legislation affecting these several industries. Its columns contain thoroughly practical as well as scientific information upon all branches of Farm Practice, Tillage, and the Cultivation of Crops, Stock Breeding, and Management of Cattle, Horses, Sheep and Pigs, in health and disease; Dairy Methods upon improved modern lines; Fruit Growing, including the Suppression of Orchard Pests; Poultry Rearing, Special Industries, etc., etc., besides critical Reports of Shows and Market Quotations from every farming centre in the colony.

The "New Zealand Farmer" is the only paper in the colony wholly devoted to the interests of Farmers, Wool Growers, and Orchardists.

Subscription: Per annum, 12s 6d, posted in advance, 10s.

Send your Subscription through any Stationer or direct to the

PUBLISHING OFFICE, FORT-ST., AUCKLAND



AMERICAN BRED QUEENS.

My Golden Strain are not Excelled for Beauty or Honey Gatherers.

Tested Queens \$2.50 ea.

Untested Queens \$1.50 ea.

SAFE ARRIVAL GUARANTEED.

J. W. MINER,
RONDA, N.C., U.S.A.

The Australian Pastoralist

AND BREEDERS' GAZETTE.

PUBLISHED MONTHLY.

Price, 3s Per Annum.

Contains all the leading Pastoral Intelligence.

Address Orders—

P.O., Woolloongabba,

BRISBANE, QUEENSLAND

IN THE MATTER OF

ANTHONY HORDERN'S FAMOUS LOW PRICES.

We have much pleasure in announcing that the following new Price Lists are now available on application.

MEN'S MATTERS,

being a Catalogue of Tailor-made Clothes, Men's Mercery, Men's Hosiery and Juvenile Outfits.

EGGS and HONEY.

Price List of everything required by Poultry Raisers and Bee Farmers. Incubators, Bird Goods, Etc.

SEWING MACHINES,

The "White" and Frister & Rossmann's of both of which we are Sole Agents.

WOOLS FOR WORKING,

Knitting and Embroidery Silk, Purse Fittings, Material for Needlework, &c.

GROCERIES and PROVISIONS,

Also of Tobacco and Cigars, Confectionery and various Household Stores.

BOOKS FOR THE MULTITUDE.

Copy of one or all Post Free on application

ANTHONY HORDERN & SONS

Only Universal Providers,

HAYMARKET (ONLY) SYDNEY.



MAITLAND, N.S.W.—JULY 29, 1904.

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

Supply Dealers.

- R. K. Allport, 4 O'Connell St., Sydney.
 A. Hordern & Sons, Haymarket, Sydney.
 The W. T. Falconer Manufacturing Co.,
 Jamestown, N.Y., U.S.A.
 L. T. Chambers, Franklin-St., Melbourne

Queen Raisers.

- W. Abram, Beecroft.
 H. L. Jones, Goodna, Queensland.
 E. T. Penglase, Fernbank P.O., Gipps-
 land, Victoria.
 T. Bolton, Hamilton, Victoria.
 R. H. Jervis, Moss Vale.

Honey Tins.

- Chown Bros. and Mullholland, Ltd.,
 Thomas St., Ultimo, Sydney.

Miscellaneous.

- A. Hordern & Sons, Haymarket only,
 Sydney.
 P. J. Moy & Co., 161 Sussex St, Sydney.
 Corney & Co., 55 Clarence-St., Sydney.
 H. Prescott & Co., 336 & 338 Sussex-St,
 Sydney.
 W. L. Davey, Station-St., Fairfield, Vic.

The trouble of beekeepers in Australia is becoming, not how to produce honey but how to dispose of it.

WE have to thank the members of the Victorian Apiarists' Association for the repetition of the honour of appointing the "A. Bee Bulletin" their official organ. We fully appreciate the honour and responsibility. As we stated at the time, we are not supply dealers. It is not our desire to sell hives and appliances, irrespective of whether there are enough beekeepers in the country or no, or that by increasing the number of beekeepers we are doing our best to impoverish other beekeepers by lowering the selling price of honey. Perhaps at such a time it might not be out of place to look things straight in the face. We will begin with ourselves. We did not have a great season last year, and not to run counter with neighbouring beekeepers we confined ourselves to a storekeeping trade. This year there has been a winter white box flow, and we have extracted to relieve the hives. Can we sell? No. Our honey remains on the storekeepers' shelves, and when we ask how it don't sell, the reply is, "There is honey everywhere!" Men in government employ, who would fight hard and fast for their rights, and their hours of labour, have their Saturday afternoon and their eight hours a day, have been overheard praising what a splendid industry bee-keeping was. The honey was all 'bunce' to them. If they only got 8s a 60lb. tin, that does them. They ignore the man

who has spent time and money to rear a family by his apiary, and wants to sell his honey at a living price. That man has no Labour party to back him. The question is, "*Who is missioning these government men?*" Beekeepers, answer this yourselves! We went to Sydney and made enquiries. The Commission houses have so much honey in stock they don't want any more. One man told me he could sell several tons at 2d. per lb. Deduct freight to Sydney, tins, labels, labour and time in working among his bees, and preparing for market, commission, etc., and then reckon how it pays the unfortunate beekeeper! Went to Melbourne. What there? Every commission agent stocked and stocked, and did not want to handle more. How about the foreign markets? We have heard of that for the last 12 years. It has always been going to be *so great*.

Are there not, both in Sydney and Melbourne, scores and scores of bright, sharp, commission men, sending all classes of produce all over the world, and struggling their very best to get honey away as well as every other kind of produce, and their warehouses, as one man put it to us, stinks of honey that they can't get away. If there is one colony more than another that has done this missionary work of beekeeping it is New South Wales. And Melbourne, with its glutted stores, is now the sufferer with its overflow. And yet, there are people in Victoria that would continue the same policy there, inducing young men to become beekeepers, who are told all the good things about beekeeping, but they are not recommended to subscribe to the "A Bee Bulletin," that has always given every side! Beekeepers, we earnestly ask you to think these matters out. You have a live Victorian Association, with a President and Secretary, both looking for their living from their bees, and to both the reduction of the price of honey would mean a vital loss. Join it, get all you can to join, and work and have your say in it, if you think the industry worth following. And at the same time we ask you to help

us. It is by subscriptions and advertisements alone we can make the "A. Bee Bulletin" pay. *It is not a trade circular to sell goods.* We cannot afford to pay writers; give us your little correspondence; ask other beekeepers to help us by subscribing; and let us hope by our united efforts we can bring the industry back so that those in it may get a somewhat decent living out of it.

Honey was recently sold by public auction at the Maitland produce sales at 1d per lb. At the weekly produce sales in our nearest town, honey in large and small tins have been on the shelves month after month, the auctioneer not bothering to try to sell them. Another matter is, the winter season, when most honey is sold, is nearly over, and in most parts of the colonies, good flows are expected!!

Note W. L. Davey's advertisement on inside of cover.

At the Melbourne Convention there was a very nice musical programme rendered on the second evening.

We have not heard much of the choko of late years. It was very much boomed at one time for a honey producing plant.

Kindly patronise our advertisers, and if you say you saw their advertisement in the "A. Bee Bulletin" it will be greatly appreciated.

We spent a pleasant time both in Sydney and Melbourne, in Mr. H. L. Jones' company. He tells us he lives in the centre of forests of splendid timber for hive making.

Of the British honey season the "Beekeeper's Record" of June says:—Not for some years past has the outlook been so full of promise or the signs more visible that point to a prosperous season for our craft.

Mr. H. L. Jones, of Goodna, lives in the centre of a hardwood timber district. He showed some samples of dove-tailed hives and frames made of same, for every purpose quite equal to anything we have seen from elsewhere.

Supplement to the "Australian Bee Bulletin," July 29, 1904.

Victorian Apiarists' Association Conference,

MELBOURNE, VICTORIA, JUNE 29 1904.



Of the four gentlemen at the table, the elderly one at the left hand corner is Mr. E. Tipper, the editor of this journal; next, Mr. T. Bolton, late president; next, Mr. R. Beuhne, President; next, Mr. W. L. Davey, the energetic Secretary. Mr. Penglaise, of Nerrang, is next the mantle piece; beside him is Mr. H. L. Jones, of Goodna, Queensland.

In "Echoes from Continental Bee Journals" there is an interesting article on "The Microbe of Foul Brood" well worth reading.

Mr. Davey is a staunch believer in ruberoid, and his system of painted bricks, whereby he can stand at his honey house door, and know the condition of every hive in his apiary, was very interesting to us.

We have been informed that some beekeepers in sending honey and wax to Sydney, do so without distinctive marks on the packages. It causes much confusion and delay, and in some cases unpleasantness. Will our friends note this.

The £500 which the law suits cost the Jamaican beekeepers in consequence of adulterated wax being sent to England by the Jamaica Beekeepers' Association, has got to be met by them out of their consignments, and the culprits that caused the mischief are not found out.

PARALYSIS.—We have noted on more than one occasion paralysis is more liable to hives in low situations. If the apiary is on the side of a hill, the diseased hives are in the lowest row. The bee's natural home is in the tops of great forest trees, and they want that freedom of air, the same as doctors recommend for human beings.

This is a good month for painting and overhauling hives; also removing. A strip of cardboard tacked across end of frames keeps them in place, wire cloth across entrance. You might go in for ruberoid too. Now, in cold weather, tops may be nailed on. In warm weather take top off and put wire cloth over frames. If by train put frames parallel with rails. If by waggon have frames crossways, or parallel with axle.

We have for several years past, recommended strongly the use of ruberoid for blanketing in hive. We have tried it. The bees do not eat it, and it lasts for years. They can cluster warmly and snugly under it, and it is the best aid to wintering we know of. We are pleased to be able to announce that Mr. W. L. Davey, Secretary of the Victorian Apiarists' Association, is now agent for it.

We have to thank Mr. W. L. Davey for kindly entertaining us a portion of the time we were in Melbourne. We spent a couple of most pleasant evenings at his home, and paid a visit to his apiary in company with himself and Mr. Wills. Mr. Davey has been rather unfortunate as a beekeeper, but he believes he has a good season before him now, and we sincerely hope his very best anticipations will be realised.

After the Convention, while some members visited tin works, others, ourself among them, visited the Spottswood glass and bottle works, the largest we believe in the southern hemisphere, where some 500 persons are employed. The works were in full swing, and watching the workmen all so busy in the manufacture of the different jars and glasses, the number of furnaces at which they were blowing the various kinds of bottles and jars, looking at the stacks and stacks of same, all was intensely interesting, and elicited the most intense admiration of the visitors.

Coming home from Melbourne we stopped a short time at Wodonga, where we saw Mr. Bassett. Unfortunately, he has been ordered to remove his bees out of town, and when we saw him was busy finishing a mud honey-house at a new place some miles away. We spent also a pleasant time with Mr. Dibley and his son, who are somewhat in the same predicament, but awaiting orders to remove, which we hope they won't get. We also called on Mr. Maxwell, of Albury, Mr. Maxwell during the past four or five years has had a sad series of misfortunes, but although not as young as he was, is still brave and cheerful to face the future.

We also visited the factories of Mr. Chambers in Franklin street. He has most perfect machinery for the manufacture of hives and frames, showing us a large stock of his cheap hive, which, while of the standard size, the frames are reversible. He has some massive machinery for the manufacturing of berry boxes, some millions of which were in stock and being disposed of annually.

Solid blocks of Queensland timber, over three feet in diameter, are placed in a machine, and then peeled into a thinness suitable for the berry boxes. Another industry he has developed is that of the cyclone gates and wire fences, for which he has the patents for Australia. We saw the workmen manufacturing it, and have decided the next fence we want, pig or otherwise, we'll get it there. The cyclone fences and garden gates also, were a discovery. The frames are made of strong steel tubing, and the wiring is of the best kind, and most ingenious workmanship. It is worth getting catalogues.

MAILING QUEENS.

On the 1st June I received from Mr. Potter, Sec. W.A.B.A., two cages of dead bees and queens. He says they had apparently been fumigated on the s.s. Kanowna. The day after receiving them I re-posted them to the Hon. A. McLean, M.H.R. for this district, who has seen the Hon. Postmaster General, and he has promised to have the matter fully inquired into. This is a rather serious matter and affects the whole of our industry. If I get any more information before you go to press I will forward it on. I am sending copies of Mr. Potter's also Mr. McLean's letter and copy of reply I sent to Mr. Potter.

E. T. PENGLASE.

(Copy of Mr. Potter's letter)

W. A. B. Association,

Claremont, W.A.

May 25, 1904.

E. T. Penglaise,
Fernbank, Vic.

Dear Sir,—I am sending back to you by this mail two boxes of dead bees. I am very sorry to say that the queens forwarded to me by you arrived dead. They had apparently been fumigated on the s.s. Kanowna, but I could not get any information from the postal authorities as to whether this had been done or not. Not knowing your conditions of export, re safe delivery, I am sending these for your inspection. Hoping to hear from you on the subject.—I am yours faithfully,

WALTER K. POTTER,
Secretary.

(Copy of letter to Mr. W. K. Potter.)

Dear Sir,—Your letter to hand, also 2 cases containing dead queens and bees. I regret they did not come to hand in good order. The day after receiving them I re-posted them and copy of your letter to the Hon. A. McLean, M.H.R. for our district. He writes to say that he has handed them to the Hon. Postmaster General, who has promised to make a thorough inquiry into the matter. The same thing happened once before, but as the dead bees were not returned to me I could not bring the matter before the postal authorities.—Yours faithfully,

E. T. PENGLASE.

Parliament House,
Melbourne.

E. T. Penglaise, Esq.,
Fernbank.

Dear Sir,—Your letter and bee box received. I have seen the Postmaster General and left both with him. He has promised to have the matter fully inquired into and let me know result.

Yours faithfully,

A. McLEAN.

Postmaster-General's Department.

Melbourne, 7th June, 1904.

Dear Mr. McLean,

I am in receipt of the letter dated the 2nd instant, which you forwarded to me from Mr. E. T. Penglaise, Narrang and Heathercliffs Apiaries, Fernbank, Gippsland, Victoria, complaining that live bees sent by him to Western Australia by post reached their destination dead, owing to fumigation of the mails, and may say that the Acting Deputy Postmaster General, Perth, has been asked by wire for a report in the matter; also whether all mails from Victoria are fumigated and, if so, whether any special mail containing live bees could be exempted from the process. You will be further advised in due course.—Yours faithfully,

H. MAHON,

The Hon. A. McLean, M.P.,
Parliament House,
Melbourne.

Postmaster-General's Department,
Melbourne, 28th June, 1904.

Sir,

Adverting to the letter, dated the 2nd instant, which you forwarded to this office, from Mr. E. T. Penglaise, Narrang and Heathercliff Apiaries, Fernbank, Gippsland, Victoria, complaining that live bees sent by him to Western Australia by post reached their destination dead, owing to fumigation of the mails, and to the Postmaster General's letter on the subject, dated the 7th idem, I have the honor, by direction, to inform you

the Deputy Postmaster General, Perth, advised as follows in regard to the matter:—

"Have heard no complaints re dead bees and parcel. Post officers state all bee boxes examined contained living bees although some may have been dead in box. Suggest special bee bags be sent and entered separately on bill, and forwarded only by contract steamers, the mails from which are, I understand, landed without fumigation."

A circular instruction has now been issued to the Deputy Postmasters General in the various States that special mail bags to contain only parcels of live bees shall be made up in the various States, such bags to be entered separately on the Bill and forwarded only by contract steamers in cases where sea transit is involved.

I have the honor to be, Sir,
Your obedient servant,

ROBT. T. SCOTT, Secretary.

THE HON. A. McLEAN, M.P.,
Parliament House, Melbourne.

Echoes from Continental Journals.

(Specially translated for A.B.B. by J.R.G.)

THE QUANTITY OF WATER CONTAINED IN HONEY.

[A question of greatest import to honey producers in moist climates such as that of our coastal districts.—Translator.]

Mr. F. Schutt, a chemist of Ottawa, published at the last apicultural convention at Ottawa, the experiments which he had made relatively to the proportion of water contained in honey under different conditions.

Omitting details of Mr. Schutt's methods of experimentation, the following actual results were observed. While honey in an ordinary atmosphere slightly loses in weight by exposure, that which is kept in an atmosphere saturated with moisture gains considerably in weight simply from the absorption of part of that moisture. The normal proportion of water was about 15 per cent.; in a moist atmosphere it in one case increased to 31 per cent., and in another, where the honey was exposed in a shallow tray, the proportion of water actually rose to more than 48 per cent.

These experiments prove that honey has a great affinity for the watery vapour of the air.

Honey which contains more than the normal proportion of water readily ferments, and, even in an unfermented state, is always much more difficult to sell, on account of its thinness. The above results as well as the experience of our best apiculturists show that honey should not be extracted before being at least two-thirds sealed; that it should be exposed as little as possible to the air, and that, unless hermetically sealed down, it should be kept in a dry place.

Some experiments made by Mr. Schutt on the honey crop for 1903:

Honey in glass jars.	Proportion of water.
Freshly extracted from sealed combs ...	15.88 per cent.
Exposed for 1 month to a dry atmosphere	14.24 "
Exposed for 1 m'n'h to a moist	31.46 "
Honey on a shallow tray.	
Exposed for 20 days to a dry atmosphere	13.84 "
Exposed for 20 days to a moist	48.23 "

—"La Revue Electrique d'Apiculture."

THE MICROBE OF FOUL BROOD.

Professor Ulrich Lambotte, of the Bacteriological Institute of the University of Liège, has devoted himself to very close investigations concerning the microbe of foul brood in bees.

This bee-plague till now had been considered as due to a special specific bacillus studied for the first time by Cheshire who gave it the name of *bacillus alvei*.

This microbe was speedily accepted by all scientific beekeepers as a clearly specific bacillus, in its nature disease producing in the same way as that of plague or cholera, and only invading the larvae after having been introduced into the hive from without from some external source of infection.

But many cases of foul brood epidemics observed as happening apart from any neighbouring source of infection, do not receive an adequate interpretation if one maintains, like Cheshire, the absolute specificness of the *bacillus alvei*.

The special studies upon this microbe to which Professor Lambotte devoted himself, soon showed that this *bacillus alvei* was none other than the *bacillus mesentericus vulgaris*, a microbe well-known in bacteriological laboratories.

Although it is difficult to realize experimentally the natural conditions of an infection, the eminent bacteriologist has several times succeeded in the artificial production of foul brood by means of the two *bacilli*, and the two produced identical effects. The only difference between the brood thus rendered foul-broody, and that which has been naturally tainted with foul brood is that the number of diseased *larvæ* is less in the first case.

Here, then, are the conclusions that Professor Lambotte draws from his discoveries:

1. That *bacillus alvei*, described by Watson-Cheyne and Cheshire as the specific agent of foul brood in bees, is none other than a variety of a very common microbe, widespread in nature, the *bacillus mesentericus vulgaris*.

2. This bacillus is met with in healthy hives, in the cells of the honey-comb as well as in the intestines of the bees.

The *bacillus mesentericus* produces by its multiplication in the tissues of the *larvæ* the characteristic changes of foul brood.

The foregoing data, based upon experimental proofs should be taken into consideration by beekeepers.

Certainly, when foul brood appears in a hive, one cannot exclude, *a priori*, the advent of the *bacillus* from without, it may be from robbing bees contaminated by contact with a foul broody hive, or, again, from the wax used in making comb foundation, preserving some spores which had come from a diseased colony.

But the beekeeper should not always attribute the start of the disease among his bees to an outside source, and so, perhaps wrongfully, accuse his neighbour as the cause of the disaster in his own apiary.

Like the disease among silk worms, known as *flacherie*, foul brood must often result from bad conditions, not yet clearly determined, it is true, but without much doubt provocation of the disease, bad conditions of nutrition and of hygiene of the hive and its inhabitants.

Sanitation of the hive, then, in its fullest sense, should be the first endeavour of the apiculturist.

Certainly, in case of foul brood, this should radically neutralize the hot bed of infection. The well-known resistance of the spores of the *bacillus mesentericus* to chemical agents—such as formalin, sublimate of mercury, or carbolic acid, the disinfectants in general use—should cause one to reject all these substances as having but illusory effects, and to adopt the only efficacious plan, the destruction by burning of the affected hives.

But foul brood will not disappear from an apiary, even if all the spores of the diseased *larvæ* were destroyed, if one does not strictly attend to the laws of cleanliness and hygiene among his other hives. The *bacillus mesentericus* is so widespread in nature that it will afresh invade the *larvæ*, if the dainty inhabitants of the hive are not maintained in those normal conditions indispensable to their development.

Let us hope, says "Le Rucher Belge," from which the preceding has been taken, that, thanks to the research which has just shed an altogether new light upon the question of foul brood, science which has given humanity the *serum* to cure diphtheria etc., may soon discover one to abolish foul brood, so that the *sole remedy* which can now be relied upon—the destruction by fire of the tainted hives—need no longer be counselled.—"Révue Eclectique d'Apiculture."

TO NOVICES.

Carefully avoid provoking the onset of disease among you bees. Know then:—

- 1.—That to examine a colony in cold weather is as imprudent as if one drew a baby from its warm cot to expose it in its little nightshirt to a keen current of air.

2. That the more the brood nest is spread the greater will be the danger resulting from loss of heat, and the latter is the first necessity for the bees, especially in early spring.

3. That to stimulate laying in a colony ill provided with stores is very great shortsightedness.

4. That strong colonies, with abundant stores, have no need of your help, but only those unfortunates who are backward in the race, which is generally due to your own fault.—“Schweizerische Bienenzeitung).

The greatest enemy of bees is the ignorant beekeeper.—C. Zwilling, in “La Revue Eclectique.”

VICTORIAN APIARISTS' ASSOCIATION.

[W. L. DAVEY.]

Will all our members and friends who do not hear from me, kindly post me their replies to the letter at foot hereof, as I cannot manage to write to them all. I should be pleased if they will accept this as a personal letter asking their opinion. I have written to 20 but would like a full reply from all members.

As we also have much that needs to be done it would be very acceptable if members would send their subscription in the same envelope. I might say that I have never been so busy on the Association work as now, being kept busy answering letters and correspondence from 7 o'clock in the evening until 12 o'clock midnight ever since the Conference, the interest in the good work that this Association is doing is growing so rapidly, that I think members will not need to be asked more than once to keep the financial part of the Association on the right side of the ledger.

Department of Agriculture,
July 4th, 1904.

Referring to the requests made by the deputation which lately waited upon the Minister of Agriculture, will you be so good as write to 10 leading apiarists, and obtain answers to the following questions, which you will be good enough to forward to me when received:

1. How many miles will bees travel from their hives to obtain food in bad seasons when the blossom is scarce?

2. As a rule how far apart are apiaries when situated closely together in forest areas or Crown Lands? Give this information in miles.

3. How far apart is it necessary to have them in a bad season when food is scarce?

I have the honor to be, Sir,
Your obedient servant,
R. W. WALLACE,
Director.

The Secretary,
Apiarists' Association,
Station-street, Fairfield.

PHACELIA TENACETIFOLIA.

A fresh supply of seed having arrived from Europe, beekeepers may obtain same at 6d an oz. on application to R. Beuhne, Tooborac, Vic., or E. Tipper, Willow Tree, N. S. Wales.

Will the gentleman who asked me about phacelia seed on behalf of somebody else interested in this plant (during the recent convention) kindly communicate to me the name.

R. BEUHNE,
Hon. Correspondent.

POSTAGE IN NEW SOUTH WALES.

Some six months ago two queens in Benton cages were posted at Willow Tree for Tomago, near Hexham, a distance of 123 miles, both being on the Great Northern Railway. They arrived at their destination nine days after postage, one queen being dead, and the other cage no queen in it. On Thursday, July 14, an important parcel of proofs and copy was posted at West Maitland for Willow Tree, 115 miles, along the same main line of railway. They arrived at their destination on Monday, July 18. Perhaps the Postmaster General may know what is wrong. The post marks are very indistinct.

WORK FOR THE MONTH.

Now is the time to get your hives ready for increase for the coming season. It does not pay to get the colonies of bees in good condition for the harvest; and then be unable to give them plenty of storage room when the

honey-flow is in good season. Your spare evening time will be well spent in reading over again back numbers of the "A. Bee Bulletin." It is so handy to do so if you have them bound.

PRICES OF HONEY.

Maitland Mercury.—Honey, $1\frac{1}{2}$ d to 2d lb., small tins 1s 8d to 2s 3d.

Melbourne Australasian.—Honey.—Prime clear garden realised from $2\frac{3}{4}$ d. to 3d., medium quality and congealed lower. Beeswax, from 1/- to $1/0\frac{1}{2}$.

Melbourne Leader.—Honey.—Fairly extensive trade was done to-day in prime clear garden lines at from 3d to $3\frac{1}{2}$ d.; large quantities of cloudy and congealed are to be purchased at from 2d upwards, according to sample. Beeswax.—Sellers report ready sale for prime clear lots, which realise up to $1/2$; medium qualities and discoloured lines return from $1/1$ to $1/1$.

Garden & Field, S. A.—Honey is moving slowly. Clear extracted $2\frac{1}{4}$ d to $2\frac{1}{2}$ d; dark and inferior $1\frac{1}{2}$ d.

Victorian Dairy Produce Auction Rooms.—Prime clear garden realised from $2\frac{3}{4}$ d to 3d; medium quality and congealed lower. Beeswax, from 1s to $1/0\frac{1}{2}$.

S. M. Herald.—Honey—Choice $2\frac{1}{2}$ d, good 2d to $2\frac{1}{4}$ d, for tins containing 60lb. Beeswax—Choice clear 1s 2d, other sorts 1s to 1s 1d lb.

H. PRESCOTT & CO.,

COMMISSION AGENTS,

336 & 338 SUSSEX STREET,

—SYDNEY.—

Make a specialty of - - -

HONEY AND BEESWAX.

—)o(—

- - - Prompt and Satisfactory Returns.

SOLE AGENTS PINEAPPLE BACON & HAMS.

TENDERS.

TENDERS requested for SUPPLY of ONE TON FOUNDATION, 8 Sheets to lb., packed in 25lb. boxes, delivered F.O.B. Steamer or Station, in 4 monthly lots. Also, 300 (more or less) UNTESTED QUEENS. Particulars of apiary and district to be given, and date of earliest delivery.

L. T. CHAMBERS,
Beekeepers' Supply Co.,
Franklin-street, Melbourne.

FOR SALE.

25 2-STOREY 10-FRAME HIVES
WELL-BRED ITALIAN BEES,
30s Each.

A. Bee Bulletin Office,
West Maitland, N.S.W.

FOR SALE.

BEEKEEPER'S CIRCULAR SAW BENCH (new.) Footpower, with all attachment for ripping, crosscutting, rabbeting, grooving, etc., complete, £7 10s.

R. BEUHNE,
Tooborac, Victoria.

Apprentices Wanted.

THE undersigned are willing to receive application from, or on behalf of suitable lads of about 15 to 20 years of age as apprentices to a course of Modern Scientific Apiculture. Thorough practical and theoretical instruction afforded in Apiaries comprising about 600 hives in the Lismore-Tweed district. Apply to

J. R. H. GAGGIN, LISMORE.

Or to GEO. JAMES, Head Apiary,
CRABBE'S CREEK, P.O.

FOR SALE.

ON easy terms if desired, BEE SUPPLY and HONEY BUSINESS. Splendid opportunity for energetic man. Particulars

E. TIPPER, (*Bee Bulletin*)
West Maitland, or Willow Tree,
N. S. Wales.

Victorian Apiarists Association.

ANNUAL CONFERENCE.

The 5th Annual Conference of the above took place in the Federal Coffee Palace, Collins-street, Melbourne, on Wednesday evening, June 29, and two following days.

There were about 35 beekeepers present. Mr. F. Bolton was in the chair.

On the table were a number of samples of honey, etc. Mr. Bolton, sample of heather honey, also wax; Mr. Penglaise, of Narrang, honey vinegar, onions, chow chow, and tomato sauce, all prepared with honey vinegar; also photos. Mr. R. Beuhne, a number of photos. Mr. H. L. Jones, of Goodna, a number of samples of honey, from England, Canada, and the United States; he had also some samples of dove-tailed hives, and frames made of Queensland hardwood, very suitable for the purpose; also some *apis dorsata* bees, preserved. Mr. W. L. Davey, Secretary, ruberoid for covers, and samples of tins with labels. Sample diseased buds by Mr. Kneebone, the effects of two much rain.

Proceedings commenced by the reading of the minutes of last annual meeting by the Secretary, Mr. W. L. Davey. He also read the annual report.

"It is with pleasure and regret that I present the transactions of the past year to this meeting.

"I congratulate you on the rapidly extending scope of our influence and work. Our members are still increasing, we now have 99 members on the roll. Last year we had 80. Although they are not all financial, I have reason to believe that practically the whole of them are in full sympathy with us, and are only debarred from making their name good by the continuous stretch of bad seasons that have visited us time and again.

"We have been successful in "Forest Preservation," having been instrumental in preventing the wholesale destruction of many miles of valuable bee country. This is our first success in this work, we know it will not be our last.

"We have gained the sympathy of Dr. Howell who is eager to discover for us any adulteration, etc., of honey, beeswax, etc.

"We are in touch with Dr. Cherry, who most kindly volunteered to give us an address, and is in full sympathy with us in our battle with diseases.

"We have gained the sympathy of Mr. A. Tatham, an ex-member of the Lands Department, who will to-morrow give us an address on Forest Preservation, and that at no little trouble to himself.

"The movements we have on foot are of such importance that (if successfully carried out) by all members individually and collectively, they will place this Association and our industry on a most satisfactory footing.

"After last conference your executive were to wait on Mr. Taverner, and did so, but his first experience of the beekeepers was of so lively a description that he fled to Mildura. Now if the present Minister tries the same dodge and place we shall be ready for him, as I have much pleasure in informing you that a branch has been formed at Mildura.

"The one note of regret is that you will be asked to remove the name of a certain beekeeper from the records of this Association.

Apart from this one exception, the prospect of this Association continuing to flourish is very high indeed.

W. L. DAVEY,
Secretary.

BALANCE-SHEET, MAY 31st, 1904.

INCOME.

	£	s.	d.
By Balance last year ..	0	18	5
Subscriptions for year ..	9	5	5
	10	3	10
Balance owing ..	13	10	9
	£23	14	7

EXPENDITURE.

To Affiliation fee, Chamber of Ag'c'tre	2	0	0
Hire of Room for Conference ..	1	10	0
Printing Letter Heads ..	0	13	0
Affiliation fee, V.F.P. League ..	1	0	0
Type-written Letters, e.c., re			
Statistics ..	0	9	0
Secretary's Allowance ..	10	0	0

Advertisements ..	0 15 0
Postages ..	2 14 1
Sundries and Stationery ..	0 15 0
Mr. Beuhne, expenses ..	1 4 3
Circulars and Advt.s. in 'A B.B.' ..	2 14 3
	<hr/>
	23 14 7

Mr. Davey estimated that last year there were 4,200 hives owned by 99 members producing 700,000lb. of honey per annum, worth £9,390, and 7,500lb. of beeswax, worth £370. The bees the property of members were worth about £6,500, and he thought the buildings and appliances used in the industry were worth another £6,500. The figures quoted by the Premier recently showed that there were 4,400 beekeepers in Victoria, owning 32,000 hives, producing 1,000,199lb. of honey. Thus, while the association only represented one-eighth of the hives in the State, it produced 7-10ths of the total honey made.

Mr. Chambers said it would be well to know what has been towards increasing the interest in the Association. He had made something like 25,000 hives, but that did not represent a proportion of the hives made. There were hundreds of new beekeepers, and some means should be made to reach them. The old Association were well able to pay their way, and had funds all the while.

Mr. Peter Smith alluded to the erroneous way the statistics were collected by the police.

Mr. Davey usually wrote for the list of beekeepers in the district. He had done his best to get new members. He wrote to them personally.

Mr. W. Davey said that with reference to the finances, the subscription paid last year by members was £3 10s whilst the Association in that year produced £12,000 worth of honey, was not the subscription too paltry an amount out of £12,000, for the year just closed £9 only. If they wanted an absurd Association he would no longer be their Secretary, but if they wanted a sound business Association then let them make the subscription such

as would make both ends meet. Our printing was getting heavier, postages likewise; affiliation fees with other Associations cost us £3—where we spent nothing before. Advertisement of Conference in weekly papers was also new expense. He was of the opinion that the Association was in work and influence prospering, and if members wanted more than a mere plaything then they must pay for it. They must give him £30 per annum clear of any allowance to himself, and he would do his best to make the organisation a strong business-like concern, admired by its members and feared by its enemies. If they failed to give him the necessary funds to work the Association, then he would at once wash his hands of the whole concern. We had in the past quite enough of play concerns, let us pay for something decent and tangible, a real live Beekeeper's Association, in actions more than words. Let them do this and he was their man from start to finish.

Mr. Beuhne then read his report as correspondent:

The correspondence during the year included a variety of subjects, and I have tried to answer the many questions to the best of my knowledge, which, however, occasionally was not up to the requirements of the questioner, as, for instance, in the case of the question "how to make very dark honey light in colour," and in another case "whether bees are kept at Jaffa, near Jerusalem."

Beekeepers at Mildura have had a good deal of trouble and anxiety during the season, owing to their conflict with fruitgrowers, or rather, raisin producers. This entailed some amount of correspondence. I had some difficulty in giving advice which was asked, as questions of law, etc., were involved, but being aware of the expense and trouble caused to beekeepers in similar disputes in America, I advised against legal proceedings. To save time I will not weary you with further details of correspondence, copies of which are available for your perusal in the correspondence book.

As representative of this Association on the Council of the Chamber of Agriculture and Rural Producers' Association, I have attended the quarterly meeting of the Council. At the second meeting I brought forward the question of Preservation of Timber on Roads, Commons, and Reserves. The matter was received sym-

pathetically, but after some discussion there appeared to be some doubt as to the ownership of or responsibility for the timber on some of these lands, and at the request of the President I withdrew the motion for the time being the executive undertaking to obtain the necessary information in the meantime, and the matter to be dealt with at the annual conference at Kynteton.

I consider this an important matter in itself, and as a first step in securing recognition for the wants and requirements of our industry in other directions.

The motion proposed was as follows: "That this Council of V.C. of A. & R. P. Association communicate with all affiliated Societies asking them to use their influence with Municipal Councils and other bodies for the preservation of the natural flora on roads, commons and water reserves, and also for the consideration of the wants of the beekeeping industry in the selection of plants when planting trees, shrubs, etc., for shelter, shade and ornament.

Unfortunately, owing to the clashing of dates, I am not able to attend the Kynteton Conference. I have therefore asked the Secretary to hold this matter over for next quarterly meeting of the Council.

In connection with this matter I shall bring forward a suggestion or proposal for a better way than the present for dealing with matters affecting our industry which crop up during the year, which cannot be left over to the annual meeting without losing favourable opportunities for furthering our interests.

During occasional visits to Melbourne I interviewed the Director of Agriculture in reference to the several investigations referred to the Department of Agriculture by this Association. As these subjects are included in our programme I need say no more at present.

Acting upon information received privately, I attended a sitting of the Forest Commission, held at Bendigo, January 20th, and through the instrumentality of the Secretary of the Bendigo Branch of the Victorian Forest Protection League, was fortunate enough to be called on to give evidence on behalf of our industry. This I did to the best of my ability in the short space of time allotted to me. I dealt with the subject in a way conforming to the opinions and wishes of a majority of the members of this Association, avoiding extremes in my statements as to the profits of our calling as well as in demands for consideration of our interests.

As I had not been deputed by our executive but acted in anticipation of your approval, I now submit my action for your endorsement or otherwise.

Mr. Smith thought it was very hard Mr. Beuhne should be at expense, moved the reports be adopted.

Mr. McFarlane seconded. Carried.

The President in his address, said that the beekeeping industry was improving, the market was improving, and the outlet increasing. The honey flow had been a comparative failure all over the State. In spite of this tins and tins of honey were to be seen in the stores. This, perhaps, discouraged people, who wondered whether it was worth putting more money into the industry. Honey was bringing 2½d. to 3d. per lb. in Melbourne. They ought to improve their trade outside Victoria. Strong competition was threatening from New South Wales, and they already had South Australian honey on the Victorian market. Shipping freights were so low that beekeepers in other States were able to land their honey in Melbourne more cheaply than Victorians who had to send their honey by rail. There were many openings for honey outside Victoria. He had himself sent honey to India, where the granulated honey was in demand. Three different firms in Johannesburg had written to him asking for honey, but he could not supply the demand. He did not wish to boom the industry, but he felt that the prospects were good. They ought to do something in a co-operative way. He was anxious to see the Association growing, but there should be a larger proportion of beekeepers members. They must represent the bee-farmers of Victoria really, and not only a section of them nominally. He was pleased to see that the Government was taking notice of the industry, and in the forest expert Mr. Tatham, and Mr. Murray, the Minister for Agriculture, we have men very strong on behalf of the industry. It was a great gain compared to what the industry has been looked upon. The matter of ringbarking was still in the same state it was twelve months ago. It depends on getting security that the trees would not be destroyed. The grazier thought he had a right to the trees, but they belonged to the nation, not to him. It fell to the beekeepers to fight for the principal that trees did not belong to the lessee of Crown lands. They had reason to be

pleased with the Forest Protection League at Maryborough, and with the work Mr. Blackbourne was doing in connection therewith. He trusted the Association would prosper, and do good to the bee-keeping industry.

The question of approaching the Minister of Lands in reference to an extension of the beekeepers' license on Crown lands was discussed at length, and it was decided to wait upon the Minister on Friday.

A letter was received from Mr. Davey, resigning his position as secretary, in consequence of a letter he had received.

After discussion, Mr. Russell moved Mr. Davey be appointed honorary secretary pro. tem.

Mr. Davey moved a select committee be appointed to enquire into a charge of breaking a rule of the Association.

The meeting resolved itself into committee, Mr. Tipper taking the chair.

A complaint by Mr. Davey, that a member had placed an apiary within the three-mile limit of Mr. Davey's apiaries was considered. It was moved by Mr. P. Smith, seconded by Mr. R. Davis, jun., "That as the member has consented to remove his bees in the spring, no further action be taken.

After conversation, in which the want of permanence and more room for the apiarist's residence was discussed, Mr. Davey moved that a deputation to the Minister be arranged to ask for an increase of area from one or two acres to five, and that a rental of 10s. per annum be paid for every square mile of green timber within a radius of so many miles of his bee farm.

Mr. Hallam moved and Mr. Geue seconded "That with a view to furthering the beekeeping industry, it is suggested that this Association endeavour to obtain in the country lists of land suitable, but unoccupied by beekeepers, with the exclusive rights of the tree tops for a radius of $1\frac{1}{2}$ miles from his site, at a suggested rental of 10s. per square mile of that radius, with the extension of his site to three acres, permission to fence and build,

and restricting the issue of further licenses to three miles distance, and that such license be for seven years."

SECOND DAY.

Correspondence between Mr. Davey and the Railway Commissioners caused some discussion, the Commissioners not granting facilities to this Association for cheaper travelling granted to other Associations like ours. It was resolved a deputation wait on the Commissioners, on the motion of Mr. Russell, seconded by Mr. Smith. Mr. Russell also suggested that the matter of tins being brought up free, as in New South Wales, be placed before them.

Mr. Bolton also called attention to several peculiarities in the railway charges, jars going back full travelling at a less rate than when going empty.

Mr. Jackel spoke of shipping bees from one station to another. The charges were very unfair. Had written, but got no concession. Sheep were carried at a lower rate than bees.

Mr. McFarlane, jun., said he had been told to pack tins on top of one another.

It was resolved they all go to the Commissioners.

Mr. Tatham, who is an expert on Forestry, and is now in the service of the Victorian Government, gave an address. He said that no country could possibly get on without forest protection and conservation. In Victoria there was a special need for it, for the mining industry would some day cease to exist, and the State's progress would depend almost entirely on agriculture. For agriculture extensive forests were absolutely necessary. Forest areas should, therefore, be demarcated, and a strict policy of conservation initiated. In choosing forests for protection three points in particular should be kept in view. First, they should be within reasonable distance of a market suitable for the produce; second, they should be so situated that the work of transporting the heavy logs be easy; and third, the climatic influence should be taken into consideration. One of the most important aspects with regard to this

lost point was the regulation of water supply. If it were not for the forests Victoria would be in a very bad way for water. Forests stored up the water and filtered it through gradually as it was required. In Ceylon this quality was thought so much of that no forest land over a certain height was sold by the Government. The Victorian Government should adopt a similar rule. The forests, which at present were mixed up with the Crown lands, would first have to be properly demarcated, and then careful protection exercised over them. From Rushworth to the South Australian boundary, for instance, there lay a big block of forest country, but it needed thorough conservation. At present there were three great evils ruining Victorian forests. These were over felling, bad felling, and bad conversion. From over felling the soil in many places was becoming gravelly, and would soon refuse to bear at all. To prevent this, certain areas must be absolutely closed for a short time. This damage to the soil was also caused by bad felling, which really meant careless felling, for the Australian axeman, when he liked to exercise his abilities, had no superior in the world. They, however, felled trees down hill, with the result that the trees split with the added violence of the fall, and no care was taken to save any young saplings that might be growing about the tree. Bad conversion needed immediate legislation, for the forests were suffering enormously through it. Splitters and millers felled trees indiscriminately, and left those which did not quite suit them laying on the ground. Only two out of every ten trees felled were used. In India trees were connected with each other by strong creepers, and other circumstances added to the difficulties of felling, but it was done as well as over here. After the great principle of conservation had been decided upon, there were many minor points which should be attended to. Grazing should not be allowed extensively in the forests, for the cattle ate the seeds and destroyed young trees. There were no animals to

harm Victorian forests, and few birds did any damage. Something should be done, however, to stop the wholesale slaughter of birds which was going on in all parts of the State. He had noticed that the forests near Maryborough and Bendigo were particularly empty of birds, and had discovered that they had all been shot down by boys and men. Reptiles were also killed off without mercy, though lizards, iguanas, and even snakes were most useful for the preservation of forests. He had often been asked how Australian woods compared with those of other countries. He had been in forests in India and other parts of the world, and had been through all the Australian forests, and had formed the conclusion that the latter were the easiest to work he had ever seen. (Hear, hear.). Not only were the trees in each belt of the one family, instead of being of half a dozen species, as in other places, but the seeds seemed particularly hardy and suitable for the dry country. In conclusion he emphasised the fact that Victoria must retain her forests. Quite 5,000,000 acres were necessary to keep the country going, and all of this should be immediately reserved. If the amount got lower than this, the State would before long suffer a hard time. The beekeepers were useful in preserving the forests, mainly because they were always on the guard against fire. Fire was a great enemy of the forest, and those who deliberately set fire to grass near a forest to improve the grazing deserved severe punishment. If forests were shut up for a few years after bush fires have devastated them there would be fewer fires. (Loud cheers.) Mr. Tatham said he was willing to answer any questions!

Mr. Bolton eulogised the address, and hoped in view of what had been said they would do what they could to oppose ring-barking. He urged them to get all the information they could from Mr. Tatham.

Mr. Beuhne had asked Mr. Tatham's opinion on the bad system that prevailed in the past in the Lands Department. The Forest Department should be re-

moved from the Lands Department. There was great difficulty in obtaining connections.

Mr. Hallam said permits had been very much abused. He had known beautiful red gum to be rung.

Mr. Bolton said the forests formed a decided State asset, and the sooner that was properly recognised the better it would be for the future of the country. The beekeepers had placed forest conservation in the forefront of their programme. Great damage was done in the forests by farmers ringing trees; before permits were given to the farmers to do this the beekeepers should be notified, in order that they might oppose the permits.

Mr. Tatham said in their Department the Lands and Forests are all one. The main factor is to show revenue. As soon as the forests are put in the right place then they can arrange them. He would recommend that no forest lands should be given out till this question is settled. He said he thought it would come out all right.

Mr. Bolton asked if he had taken any notice of our yellow box trees. It is condemned as a timber tree, but not in other States.

Mr. Tatham did not know the reason it was not valued here

Mr. Bolton said it was quite useless to plant for bees. The soil was not suitable for artificial crops.

Mr. Morefield said he knew a blacksmith had been using yellow box wood for spokes for wheels for waggons, with great satisfaction.

Mr. Tatham said a lot of things had been condemned simply because they had better things to work with, but the time would come afterwards when they would find it to be a valuable timber, and he believed it would be so with yellow box.

Mr. J. Blackburn (Maryborough), secretary of the Forest Preservation League, gave a history of the League, and urged beekeepers to join, in order to add weight to the membership list. He said that the trouble would not be settled until a bill was safely on the statute book of the State. (Hear, hear.) His society

had the promised support of the Labour party and Mr. Mackinnon's party, and had, it thought, the sympathy of the Government. A bill had once been prepared, and an excellent bill the association thought it. A State Forest Bill that would remove forests altogether from political control, and put under a body with a proper staff of officers. It should certainly be taken up by the Government immediately.

After a long discussion it was moved by Mr. W. L. Davey, seconded by Mr. P. Moorefield, and carried unanimously—"That this conference considers that the long promised Forest Conservation Bill should be brought on this session, thus securing the complete protection of the State forests, and making adequate provision for the carrying on of the honey producing and other rural industries."

A hearty vote of thanks was passed to Messrs. Tatham and Blackburn for their attendance.

A number of members present entered their names and paid their subscriptions as members of the Forest Preservation League.

On the subject of "Classification of Lands Department, and Lands Suitable for Beekeeping," Mr. Bolton asked for expression of opinions. If the State would classify in order to protection instead of encouraging destruction, it would be a very good thing. A great deal of the forests was not suitable for beekeeping.

Mr. Blackwood asked if the Lands Department would not consider the grazer superior to the beekeeper.

Mr. Hallam said ringbarking improves the country, and on 1250 acres a man could not get a living without ringbarking.

Mr. Bolton would take a season when he would get £75 per square mile. They could look the matter square in the face and seize upon the facts. The Government should encourage the best kind of police to protect and take care of the forests.

Mr. Davey moved—"That in the opinion of this meeting the timber suitable for beekeeping on crown lands should be classified according to its usefulness to the beekeeping industry, and such information to be at the disposal of beekeepers and producers. Mr. Geue seconded, and it was carried.

Mr. Beuhne wished to make a few remarks on the the carriage of honey. When we send honey tins away we find there are leaky tins and damage, particularly to comb honey, also bees and hives. He had had some experiences with casing and tins. During the last year or so, he did not case them, and he had no leaking. He had seen some men handling dynamite, and they were extremely careful with that. They were afraid it would damage themselves. If they could work on that idea it would do some good. In regard to comb honey it was thrown about any way. In sending fit to put into shops would make the cases to hold $2\frac{1}{2}$ cwt. It was then too heavy for one man to handle it. If not handled gingerly it came down on their toes. Put two boxes into each crate. Honey so sent was far better than sent loose. It saved expense and freight. He preferred kerosene tins, they were stronger.

Mr. Tipper preferred to send tins in cases. A nail or a pebble in the ground or in cart would often make a hole in tin and leakage.

Discussion ensued, in which Messrs Tipper, Hallam, Willis, McFarlane, jun., D. Morgan, and Bolton took part.

Mr. Morgan said the way tins were sent made a difference of 10s a ton in the freight.

Mr. Bolton considered tins should be put into boiling water. They are then tested by being blown out.

Mr. Colston moved we call upon the factory at Williamstown, and get prices for new tins. Mr. Moorfield seconded.

Mr. Chambers would get a quotation for a definite quantity.

Mr. Moorfield said many beekeepers would prefer to use kerosene tins. If

the resolution was carried, it would mean to get all from one firm.

Mr. W. L. Davey moved an amendment and Mr. Russell seconded, "That as considerable discussion seemed imminent on the subject and as Dr. Cherry was present to give his address, that the matter, therefore, be considered later on." Carried unanimously.

Dr. Cherry, Bacteriologist of the Agricultural Department, read a paper "The Growth of the Grub."

[This paper will appear in our next issue.]

Conversation ensued, in which Mr. Bolton took part. Dr. Cherry said no other food was to be compared with bean or pea meal.

In reply to Mr. Beuhne Dr. Cherry said bees will breed better in a hilly country than where there was an absence of mimosa and wattles. So far as chemical composition went flour was suitable, but pea meal and bean meal were by far the richest. There was no question that they contained two or three times more nitrogen than either flour or maize. The white of egg might be worked in along with sugar.

Mr. Moorfield asked if such artificial food agreed with bees.

Mr. Chambers said Dr. Cherry had given a great deal of light on the subject. Bees make very little headway in the spring in different districts. Pollen was sometimes a nuisance to him. The supply of pollen always creates a surplus of brood. It throws light upon foul brood. Bees differentiated. They never mixed their pollen.

In reply to Mr. Hallam, Dr. Cherry said, in connection with foul brood, the general opinion is that the bacillus is simply one commonly found in surface soil, the peculiarity being its mode of rapid increase.

In reply to a question by Mr. Beuhne, the keeping of samples sent to the Department for analysis, they are dried before being analysed. He wanted portions from different parts of plants, and at different seasons of the year.

In reply to Mr. Davey, Dr. Cherry said unless larvæ receives a proper amount of nitrogenous food it cannot develop into a healthy insect. From what he had read about paralysis it was brought about by bad food.

Mr. Beuhne said pollen would be at its best during bright, sunshiny weather, before it was too old.

Mr. Peter Smith asked if salycilic acid had turned out successful.

Mr. Chambers had tried it in every manner without arriving at any satisfactory result whatever.

Mr. Beuhne had abandoned it altogether for foul brood.

Mr. Hallam also spoke on the subject.

A vote of thanks was carried with hearty applause to Dr. Cherry for his valuable address, and he in response hoped that in 12 months time he would be with us again, when this subject would be more advanced.—Cheers.

The matter of a registered label was discussed, and referred to executive committee to deal with, Mr. Davey stating the Association would have to be registered before it could have a registered label.

On the motion of Mr. W. L. Davey, seconded by Mr. R. Smith, it was resolved "That it is desirable to advertise members' names and addresses as sellers of pure honey, to induce outsiders to join.

A letter was received from Dr. Howell desiring beekeepers to send samples of pure honey, also to inform him as to the sources from which honey was gathered, to assist him in detecting adulterated honey.

The matter of finances was now discussed. Mr. Davey said he would not undertake the duties of secretary under £15 per annum. He had plans whereby he could make the society a much greater success.

In order to put the funds of the Association on a sound basis, after much discussion, the following were put to the meeting, Mr. Penglase's motion being adopted.

Moved by Mr. Davey, seconded by Mr. Bolton, "that the subscription be 10s. per member; new members, 2s. 6d.

Mr. Morgan moved, Mr. Howell seconded, an amendment that it be 2s. 6d. for 25 hives; 1d. per hive for all additional hives.

Mr. Penglase moved, seconded by Mr. V. R. Davey, that it be 5s. for the first 30 hives, and 1d. per hive afterwards; 2s. 6d. for new members; and also for honorary members for the ensuing year.—Motion carried.

Mr. McFarlane moved, seconded by Mr. Geue, "That life members be admitted to the Association on payment of £5 5s, such persons not being commercially engaged in the industry."

An amendment by Mr. Moorfield, "That £2 2s be the fee," seconded by Mr. Garrett, was carried. This was inserted in the original motion and carried unanimously.

Conversation on future holding of meetings took place, Stawell, Bendigo, Wodonga and Melbourne being suggested. Mr. Moorefield moved that the secretary take early steps to ascertain where it might be suitably arranged, and communicate with other associations at an early date. Mr. Morgan seconded. Carried.

Correspondence was read from Mr. Davey that he had received from the Railway Commissioners relative to the granting of reduced fares to members attending conferences at same rate as allowed other associations.

Discussion ensued, in which Messrs. Hallam, Russell, Howard and Smith took part, and it was resolved, on the motion of Mr. Russell, seconded by Mr. Peter Smith, to interview the Commissioners.

Mr. Hugh Russell moved the matter of tins being brought up free as done in N. S. Wales be also brought before the Commissioners.

Mr. Jackel spoke of the exorbitant charges for removing bees from one station to another by the railways. Mr. McFarlane, jun., complained of being told to pack full hives top of one another.

FRIDAY EVENING.

The chairman thanked the representatives of the Melbourne press, the *Argus* and *Age*, for their attention to the bee industry.

Mr. Chambers alluded to the money held over by them from the old Association. He was very pleased this association was now placed on a sound basis, and would now hand the money over.

Mr. Bolton said Mr. Chambers deserved a very hearty vote of thanks for handing the money over at this time.

Mr. Chambers was made a lifemember.

Mr. Davey explained that with new members the Association now numbered 105 members.

Moved by Mr. Willis, and seconded by Mr. Moorfield, that the secretary be paid the sum of £15 per annum. Carried.

Mr. Davey returned thanks. He wanted the co-operation of all beekeepers and all members of the association, and he would try and put the Association on a sound business footing.

Mr. Bolton declined to be president for next year. Mr. Beuhne was elected president unanimously, on the motion of Mr. Colston, seconded by Mr. Hallam.

In returning thanks Mr. Beuhne wished to be relieved of the position of correspondent. Messrs. Cox and Miller were elected.

Vice-presidents Executive Council: Messrs. McFarlane, V. R. Davey, L. Wills, E. Jackel, J. Bennett.

Advisory Committee: Messrs. Geo. McFarlane, Avoca; S. Hallam, Telangatuk E.; C. J. Duncrn, Outrim; G. Smith, Bailleston; B. Buck, Rheola; C. Willan, Huntly P.O.; E. Jackel, Berwick; J. Bennett, Axedale; C. Garrett, Briagolong, E. Gippsland; J. Bassett, Wodonga; J. Yates, "Whitelaw," Gippsland; D. M. Morgan, Deep Lead, Stawell; H. Russell, Wartook; Mrs. K. L. Willan, Mansfield; Messrs. Scully, Ararat; P. Moorfield, Howlong, N.S.W.; Hoper, R. Smith.

Messrs. T. Bolton, F. Howard, W. Morgan and Russell were appointed dele-

gates of the association to the next annual conference of the Agricultural Society, to be held at Horsham on the 1st July, 1905, and Mr. R. Beuhne was nominated for a seat on the council of the society.

Mr. Bolton proposed Mr. Beuhne be correspondent. Carried.

Mr. Moorfield moved that the *Australian Bee Bulletin* be appointed as the official organ of the Association. Seconded by Mr. Colston, and carried by acclamation.

Mr. Tipper responded. Thanking the beekeepers of Australasia for their kindness and patronage. The "A.B.B." was supported by subscribers and advertisements only, not by selling supplies.

Mr. P. Smith moved a vote of thanks should be given to the late president.

Mr. Bolton returned thanks.

A flash-light portrait of the group of members present was taken by Roland Bishop & Co.

An excellent programme of music was now rendered as follows:—

Duet, Cornet and piano, Miss and Mr. W. L. Davey; Song, Miss Miller, "Come to my heart"; Song, Mr. L. R. Davey, "Homeward Bound"; Song, Mr. L. Wills, "Rouse ye my comrades"; Duet, Piano and cornet, Miss and Mr. W. L. Davey; Mr. Tipper, "O Woodman spare that tree," also comic sketch; Duett, Miss Davey and Mr. V. R. Davey; Song, "The flight of life," Mr. W. Wills; Mr. Beuhne said Miss Davey was a beekeeper, having captured several swarms. She sang "Douglas Gordon."

Mr. Beuhne asked that appreciation of the performers be shown by a hearty vote of thanks.

Carried with enthusiasm, after which refreshments were carried round.

FRIDAY MORNING.

Mr. Beuhne, president, in the chair.

Mr. Morgan proposed "That the Secretary get all the names of members of the Association, together with rules, and print and post same to members." Seconded by Mr. Howard, and carried.

Mr. Bolton moved. "That Mr. Fred Barnes be honorary auditor," if he refused Mr. Bolton would take the work if

they sent to him. Seconded by Mr. Smith and carried.

Mr. Bolton moved that Messrs. Tipper, Pender, and H. L. Jones be honorary members." Seconded by Mr. Colston and carried.

Mr. Morgan moved, "That the Executive Committee have power to draw up a code of rules for consideration at next annual conference, in the official journal, so as to be discussed in that journal three months before the meeting." Seconded by Mr. Smith and carried.

Mr. Beuhne said that more notice should be given and programme drawn up and published at least three months before meeting in the official organ.

It was announced that Mr. M. L. Davey was willing to act as honorary solicitor.—Accepted with thanks and acclamation.

Mr. Bolton gave notice of motion at next annual meeting, that the maximum of subscription be £1.

Mr. Bolton moved that a vote be taken through the honorary correspondent as to where the next meeting should be. It is desirable in the interests of the Association that the place of meeting be not restricted to Melbourne.

Mr. Morgan moved, and Mr. Howard seconded, "That it be one man one vote."—Carried.

DEPUTATION TO MR. MURRAY.

The members interviewed Mr. Murray, Minister for Lands, and explained that they represented the Apiarists' Association, and were anxious that the forests in certain parts of the State should be conserved, so far as the flowering eucalypts were concerned.

Mr. R. Beuhne, president of the Association, said that the apiarists did not wish to interfere with legitimate grazing pursuits, but asked that in the poorer grazing districts the ringbarking of trees should be restricted as far as possible. They would like to have some security and permanency, and would like the industry to be taken into account in the disposing of lands. They did not expect to get this state benefit for nothing, but would pay a certain royalty on green timber on condition such timber was kept in its natural state. They were willing to pay 10s per square mile for forests in which their interests were thus protected, and it did not interfere with any other revenue on the land.

Mr. Bolton explained the value of grazing land to sheep for ten acres was £25 per square mile. If the honey was not gathered it all went to waste. It was to their benefit and the benefit of the State to secure this, while they could offer the government permanency of location, and securing the trees from being rung. If they could so carry on the industry there would be wool-growing on the ground and honey on tree tops, an improvement of 100 per cent; and increasing the population. For the good of the district, as well as our own, we are seeking the advancement of the industry. The Department should gather information from the best districts in the State for honey-gathering. Our association would most gladly furnish information. That the department would encourage beekeepers to enter on those parts and continue by a policy of discouraging the ringbarking of trees. It was very unjust to the State that timber should be destroyed worth £75 a square mile for honey, while the production by graziers for wool did not exceed £25. He wished the department would encourage men to go in for it, and not encourage ringbarking to go on. The beekeeper should have the choice to be informed by an official in the lands a permit to ringbark has been applied for. At present, the first the beekeeper knows of such is the axe in destroying the trees. They only wanted British fair play. It was desirable to have some increase in the size of the area, for room to drive a horse, or bring a team of horses, and prevention of them being stung, graziers in particular would be liable to make trouble. He would suggest an increased area of three acres meeting the case. We would wish the privilege for the exclusive right for the tree tops and the distance between apiaries three miles.

Mr. Blackburn, Secretary of the Maryborough Forest League, made an appeal to Mr. Murray to bring in a bill immediately to prevent encroachments on State forests.

Mr. Murray said he had no time to go into the matter. He did not know very much about bee-keeping. What we wanted in the very first place is the limitation of our permanent forests fixed. The honey that would be produced would never be popular to the English palate until the people had been educated. They could not look altogether to the State. Was there no possibility of growing flowers to make them independent of their forest lands? The supply was as uncertain as wheat-growing in the mallee. They offered to give the munificent sum of £1 for three square miles, and that will yield a product of £75. If it was really as valuable it was right to offer more than 10s a square mile.

Mr. Bolton said there was a number of other contingencies that bore on the question. They only suggested that they were willing to do something on fair lines. As to the cultivation

for bees the land alluded to was of the poorest description. There was not enough honey raised to support our own market. He also pointed out that young men wishing to start in the industry had absolutely no means by which they could find out what part of the country they should go to.

Mr. Murray spoke of honey he had tasted and disliked; it was from Gippsland.

Mr. Bolton said the best honey raised and sold at 10d per lb in England compared very unfavourably with our own honey.

Mr. Murray quite recognised the force of their contention in the national interest. We should make our Crown and State Lands produce as much as possible. He would be glad to get information from the Association. About the extension of areas it was a reasonable request. He would look into the various points but would give no definite answer now.

Mr. Murray asked that the forestry officers should be instructed not to issue permits to ringbark irrespective of beekeeper.

Mr. Murray would see what could be done about the ringbarking. What was wanted was to mark the boundaries of the forests and hold that inviolate.

Mr. Beuhne said that some honey plants that were much favoured in other countries did not grow on Australian soil. He had tried to find out some that could be cultivated for farming and could be useful for the beekeeper. Had tried Californian sage, and had sent to Europe for a quantity of phacelia.

The Director for Agriculture complained he had not received samples of adulterated honey he had asked for.

The Minister said he would instruct the chemist, Dr. Howell, right away as to matter of adulteration on lines suggested by Mr. Beuhne.

Mr. Bolton subsequently interviewed the Minister, Mr. Wallace, who informed him that he was not only willing to grant them three acres, but would make it ten, so that they, the beekeepers, could make a permanent home on it.

DEPUTATION TO MR. LOCKHEAD, (Chief Traffic Manager.)

The above took place on Friday afternoon. Mr. Beuhne complained as to concessional fares granted to other societies should also be granted to beekeepers—such as were granted to farmers' auctions, clergymen's meetings, and even for land sales.

Mr. Lockhead replied the Commissioners were limiting such of late, and intended to withdraw them all.

Mr. Beuhne said in the interests of the progress of the country it was desirable to give such concessions.

Mr. Lockhead said it was a purely business transaction.

Mr. Bolton said it was on behalf of products that are otherwise going to waste, in the same

way as agricultural societies. In answer to a question as to whether they were not all interested, said it was at a great sacrifice we came there. He alluded to the business done, it was to take an interest in the industry, educational to a certain extent. Everyone present was out of pocket. It was also in the interests of years to come.

Mr. Lockhead said it was a matter for the Commissioners to decide and he would lay it before them.

Mr. Beuhne introduced the matter of carriage of honey on the railways. Honey from New South Wales, Queensland, and Adelaide was carried at a lower rate than through Victoria.

Mr. Moorefield also spoke on the question. New tins in New South Wales were carried free.

Mr. Lockhead said it was a fairly big question for the commissioners to give away revenue. The case had better be put in writing.

Mr. Bolton alluded to the matter of the unfairness in the carriage of glass jars, which should be included in the written letter.

The matter of the carriage of live bees Mr. Lockhead did not think the rate was very excessive, seeing we had to have a truck holding three tons.

Mr. Bolton hoped he might see his way to reduce it, so as to encourage removals.

Mr. Lockhead did not think the commissioners were willing to make any reduction.

Mr. Bolton—The standard package was 60lbs, would he make it 63lb weight?

Mr. Lockhead.—No chance. The rate was for 56lbs, and there was no chance of altering it. He could not make it a separate item.

A paper by Mr. Ager on beefarming was taken as read and directed to be published in the official organ—the "A. Bee Bulletin."

In reference to the flooding Victoria with honey from N.S. Wales and Queensland, Mr. Tipper said during the recent drought thousands and thousands of pounds had been sent into Victoria and Adelaide for fodder, that freetrade said should have been sent to North and South America, but the Federal Government had stood firm in the interests of the Commonwealth. A time might again come when Victoria might send honey into N. S. Wales.

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

✻ CORRESPONDENCE. ✻

W.B., Liverpool, 17th June 1904.—I had a fair season last summer, getting about 4 tons from 80 hives.

C.E.R., Baerami, 10th June.—The past season has been the best for honey that I've had for about 8 years. Since April 1903 I increased from 1 colony to 32, and taken since last November about ten 10,600lbs. of honey.

E. J. C., Tarrawingee, Victoria.—The season here was good. Cockspur, known here as "yellow jackets" yielded splendidly, being in bloom from January till April. What kind of a strainer do you prefer for honey? I have used cheese cloth, but it does not give satisfaction at all times.

[Use wire cloth.]

F. W., Geurie.—The past honey season has been very fair, notwithstanding the long drought. The yellow box bloomed fairly well the early part of the summer, and the white box has been blooming now for the past two months. The bees have gone into winter quarters fine and strong, with plenty of honey, supers being all full. There has been no rain to speak of since last March, but as I write it is commencing to rain steadily and every indication of it continuing.

W. Abram, Beecroft.—I believe we will have a good honey flow, as trees have an abundance of buds. The weather is now fine and cold at night, but in the middle of the day the bees are active. I expect an early spring.

J. F. D., Bellinger River.—Bees are wintering well here in spite of the wet autumn, and I expect a fair season this coming summer.

R. G., Coolac.—The season just past was a bad one for honey about here, but otherwise a good one for increase. The early part of last spring being so wet,

the bees had little chance of gathering anything from yellow box, the principal bloom about here being yellow-burr, or New Zealand burr as it is commonly called here. The summer has been a record dry one, but the coolest I ever remember. The bees have been humming on white box the last month, so are going into winter strong. What is your opinion about African Box Thorn for bees? I have a small hedge of same, and it is almost continually in bloom. In the summer months it is actually swarmed with bees. It is in full bloom at the present time.

[African box is a very fair honey plant, but will it pay to plant sufficient for a flow?]

J. K., Lyndock, S.A.—This year we have hardly taken any honey, but for all that we cannot sell, as the market is glutted with Queensland honey. What will it will be like next year when we are having a big flow?

W. G., Cambelltown.—I have no bee news to tell you now, but that I lost heavy, and have not taken any honey from the bees this last three years, and the bees have enough honey to keep them in good condition. Will you tell me which is the best way to shift gin case hives in a cart? Is it best to turn them up side down to keep the honey from falling, or leave them as they were at first and shift them.

[The best way to shift gin case hives is certainly to turn them upside down, covering with wire cloth or bagging. Would it not be well to put them into frame hives after you have shifted them? To do so leave them for a few days on the new stand; then remove them a short distance, say on to a table and turn upside down. Place an empty frame hive on the stand you took them from. Well smoke the bees into one corner of the gin case, and cut combs out. Have frames laid on three or four strings, long enough to tie over. As you cut the combs out, fix into the frames, and tie the strings over so as to hold them, and as you do them place in the new hive. Be very careful with all brood, placing together and in the centre. The flying bees will all go to the old stand, and when all the comb is cut out of gin box and in the new hive, shake all bees left into it as well. The bees will gradually eat out the strings, or you can in a week

or so, when the bees have fixed combs solidly cut them out yourself. Do it on a warm sun-shining day only.]

HOW TO RUN AN APIARY WITH INEXPERIENCED HELP.

We will suppose the weather is getting hot, but the season is not open yet; some of the colonies are showing signs of becoming strong, and we do not want them to get the swarming-fever, and, as a prevention, we will put upper stories of combs on all such colonies. The rest of the colonies can go without upper stories until the season opens; when all that are strong enough to go above are given one upper story each. In this way, we visit each yard about once a week, seeing that every colony has *empty combs at all times*.

As upper stories fill up, I add more on top. As we have no basswood here, 140 sets of empty combs, at each yard, will usually hold the clover crop. The having of enough upper stories full of combs to hold the crop, or nearly so, is one of essentials in my system of producing honey. It not only gives me unlimited time to do my extracting, after the season closes, but does away with so much costly and experienced help—the kind that is so hard to get. I like to have one experienced hand with two assistants, and do the work in a *longer time*, rather than use less combs and hire more experienced help to do the work during the honey season. Then, I like to leave the honey on the hives a week or so after the season closes, or until it is thoroughly ripe, before extracting. In case we have a heavy flow of honey, so that we need more room than is furnished by our 140 sets of combs, we extract from the heaviest; always selecting colonies that have on two upper stories, leaving the light ones, that have the unripe honey, for some future extracting. In this way we get our crop all in fine shape for the market, and secure the kind of honey that makes customers ask for more “just like the last.”—*Beekeeper's Review*.

An article by W. Abram unavoidably held over till next issue.

SMOKE.

It is the currently accepted belief that smoke “frightens” bees. It is doubtful if bees fear anything. It is probable that smoke simply acts as a nerve excitant, producing disturbing sensations, which in turn react and cause the bees to gorge with honey or to precipitately flee. I question whether the taking of food under such circumstances is anything more than a nervous reaction. There is nothing but sentiment to suggest that on the bees part there is forethought of loss of home or food. When smoked excessively the bee fights, “sacrificing herself for the sake of home and sisters” the legend runs. But 'tis hardly true. A point has been reached in nerve excitation where the sting mechanism is stimulated. As all parts work in unison so must the bee-fly towards that which excites the nerves of the eyes and on striking the object the rest of the actions occur in regular sequence. The bee possesses a highly developed nervous system but its power of associative memory decidedly limited. Beyond finding its way to the source of nectar or food supply and back to its domicile and noticing any marked change in the appearance or surroundings thereof, I have failed to note any evidence of a “mind” in bees. Every other function can be explained perfectly as reactions to excitants or nerve stimuli.

To revert to sting action. The application of smoke or heat can be carried to a point where the bee doubles up until it stings itself, or of when forced almost to this, the abdomen be severed from the thorax, the anterior part of the body still continues to assail and cling as before while the posterior part curves and the sting darts out and in as if the abdomen was still connected with the thorax.

Someone may ask me to reconcile these views with the action of the “guards” which dart so readily from the hive entrance at any moving object. The movements excite (set in action) the optic nerves which in turn react on the organs of flight. The bee approaches the object and if the latter causes continued or

increased nerve stimulation, either through the organs of sight, smell, hearing or touch, the sequence is assault.

Why do bees feed the larvæ? They have to. They cannot help themselves. This article is but the merest allusion to the laws underlying all life. With man and the higher animals associative memory and reasoning enter into the problem but with the lower orders movements are merely the results of various stimuli (such as heat, light, electricity, gravity, touch, etc.) acting on living tissues.

When we can rid ourselves of the old beliefs of the reasoning power of bees, of a lot of unknown but supposedly marvelous and complex laws, and go to searching for the stimuli behind each action we may then hope for a speedy solution of the swarming problem and similar perplexing questions.—A. C. Miller in *American Beekeeper*.

PLENTY OF ROOM PREVENTS SWARMING.

The prevention of swarming in the production of extracted honey is not a very difficult matter; as the putting on of upper stories not only keeps down swarming, but secures the crop, all in one operation. It all hinges on the *one* essential, *large hives*. Of course I keep the entrance wide open during the warm season, and if the bees still show signs of being crowded, by hanging out during the heat of the day, I raise up the back end of the cover, and this gives such a draught through the hive that they will usually go in. Don't let your bees hang out during the honey season; after the season closes, and there is nothing for them to do, they will usually cluster on the outside of the hive in large quantities, if the weather still keeps warm, but as the swarming season closes with the honey season, there will be no swarming. I told you above that large hives were essential in preventing swarming, or, in other words, plenty of comb-space must at all times be available for the bees to store their honey. This condition is secured with a

ten-frame upper story, filled with eight combs of the Langstroth size.—*Beekeepers Review*.

A SORROWFUL LETTER.

Owing to the death of my husband and having a large family to support. Since then things have gone from bad to worse, first the drought killed four out of six of my cows. I was milk selling to keep things going, and then my health broke down, in fact it has been nothing but sickness and trouble, and loss, for three years. I have just been home a week. I have been ten weeks away nursing one of my boys through scarlet fever and dropsy. You can judge for yourself what sort of a fight I am having. I have been trying to come to West Maitland for some time, but I have not been able to manage it yet. If I had, I would have called and explained matters. I intended calling as I came from —, but I had to come direct home, as some of the children was sick with influenza. Will you kindly stop sending the "Bulletin." I am sorry to stop it as it has been a great help to me, but I cannot run any further into debt for it. And if God ever gives me the means to pay, you may depend upon getting it, but God only knows when that will be. I am trusting Him to help me to keep myself and my children honest.

[Our deepest sympathy is with you. May the All Seeing One ever watch over you.]

The American Bee Journal asked the question!—If for some reason you were to start in anew to keep bees, and were obliged to get an entirely new outfit—Would you use a reversible frame? If so, why? There were 28 replies. 26 noes, 2 yes. President Whitcomb of Nebraska, says that when bees are mad, a poisonous substance like formic acid was dropped on the honey by them, and this was why honey taken by the robbing process was often fatal.—*American Bee Journal*.

A RECORD SEASON

We are experiencing, and if you want ITALIAN QUEENS, reared under the most favourable conditions and from the best breeders, we can supply promptly. For over 20 years we have made the breeding of fine Italian Queens a speciality.

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

All Queens post free, and safe arrival guaranteed to all parts of Australasia
50 page Catalogue free.

H. L. JONES,

GOODNA, QUEENSLAND.

IF YOU KEEP FOWLS,

—YOU SHOULD READ—

The Australian Hen.

THE LEADING POULTRY PAPER
PUBLISHED IN AUSTRALIA.

—):o:(—

Send for a sample copy (a post card will do)
which will be mailed free by return, if you
mention this journal.

—):o:(—

Address—THE MANAGER,

‘The Australian Hen,’

724 George-Street, Sydney,

POULTRY AND BEES.

POULTRY combines better with Bees than
anything else, and to succeed with either
you need a good journal on the subject.

The Poultry Journal

It is a thoroughly practical poultry paper and should
be in the home of every one who keeps fowls.

Published on the 15th of each month.

SUBSCRIPTION, 2s A YEAR.

SAMPLE COPY FREE.

Address: THE PROPRIETOR,
Medina, N.S.W.

NARRANG APIARY,

FERNBANK, VIC.

Book your Orders now for Golden or Red Clover
Queens early in September.

Read what others say about my Queens :—

Tooborac—Dear Sir, The tested queen is a very nice
one. I have one lot of queens from her laying now.
They are very uniform in colour, and started to lay at
the same time, notwithstanding the unfavourable con-
ditions.—R. Beuhne.

Buangor—Dear Sir, The selected queen I got from
you is very prolific, her young queens being as much
alike as peas in a pod, and are real beauties. Anyone
getting your bees will want more, as they are an ex-
ceptionally fine strain.—T. G. Matthews.

Claremont, N.S.W.—The queens arrived in splendid
condition, and have started to lay.—W. H. Farley.

Vasse Road, Bunbury, West Australia.—I am pleased
with the last queen you sent; there was not one dead
bee in the cage. Please send six untested and one
tested.—John A. Ayre.

Willow Tree, N.S.W.—The two queens I got from you
worked up well and quickly. Unfortunately there has
been no flow yet to test their honey producing qualities
or their offspring, but I have no fear for them.—E.
Tipper.

NUMEROUS OTHER TESTIMONIALS

E. T. PENGLASE,

NARRANG APIARY,

FERNBANK P.O., GIPPSLAND, Victoria

JUNE 18, 1904

The Australian Bee Bulletin.

When you want any

PRINTING !

Try the

Australian Bee Bulletin Printing Works.

West Maitland, N.S.W.

QUEENS. QUEENS.

DO YOU WANT GOOD QUEENS
Queens that will rake the Honey in,
at Moderate Prices.

Then write to

T. BOLTON,
GRAMPIAN APIARIES,
Hamilton, Victoria,

One of the Oldest and Most Successful
Queen Raisers in Australia.

	One	Three	Five
Untested	5/-	14/3	22/6
Tested Select	15/-	42/-	70/-
Tested	10/-	28/6	45/-

Only half risk postage on select and breeders,
also vacancies for a few pupils next season.

CORNEY & CO.,

GENERAL COMMISSION AGENTS & MERCHANTS,

Agents for the Sale of all descriptions of

FARM & DAIRY PRODUCE.

— SEND YOUR —

Poultry, Eggs, Butter, Cheese,
Bacon, &c., &c.,

— TO US. —

THE UTMOST SATISFACTION GUARANTEED.

Highest Prices Realised, Prompt Payment

Sole Agents for Herbert's (English) Federal
Sauce and Condiments.

CORNEY & CO.,

55 CLARENCE-STREET, SYDNEY.

24rd Annual Price List of Best Italian Queens from the First Bee Farm in Australia, recognised as Absolutely the Best Bee Farm for the supply of Queens, Hives of Bees, &c. Always winner of most prizes.

QUEENS—Untested, 5/- each.

Tested, .. one 10/- ; three, 25/- ; six, 45/-
Select Tested, one 15/- ; three 40/- ; six, 70/-
Extra Choice, one 25/- ; three, 60/- ; six, 105/-

Also, Swarms, Hives of Bees, Implements, Foundation, &c.

W. ABRAM,

ITALIAN BEE FARM,
BEECROFT, NEAR SYDNEY,

P.S.—My knowledge and experience of nearly 40 years practice enables me to breed and supply Queens Superior to Any, possessing the Most Desirable Qualities combined. Desiring to maintain that High Reputation, I again submit for your consideration the fact that I can supply to satisfaction, if you give me description of your requirements. Thanking you for past favours.—I remain. yours truly, W. ABRAM.

FANCIERS AND BREEDERS OF
POULTRY, DOGS, PIGEONS AND CAGE
BIRDS,

Should Read the

W. A. Fanciers' Journal

AND

Practical Poultry Keeper.

An Illustrated Monthly Journal.

Send for Sample Copy, Free

Published at 17, Royal Arcade, Perth, W.A.

SCALE OF PRICES.

FOR

ADVERTISEMENTS

HALF PAGE—Per Annum, £5.

„ Per Half Year, £3.

„ Per Quarter, £1 15s.

QUARTER PAGE—Per Annum, £3.

„ Per Half Year, £1 15s.

„ Per Quarter, £1.

ONE-EIGHTH PAGE—Per Annum, £1 15s

„ Per Half Year, £1.

„ Per Quarter, 12s.

SINGLE INSERTION—First Inch, 3s 6d.

„ „ Succeeding, 2s 6d.