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West Maitland, N.S.W.: E. Tipper, June 27, 1901

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THE AUSTRALIAN Bee Bulletin.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

EDITED AND PUBLISHED BY E. TIPPER.

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

VOL. 10. No. 3. JUNE 27, 1901.

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"The queens that we have received from Mrs.
Atchley are doing well, and I am well pleased
with them.—E. TIPPER.

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.

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The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

— Edited and Published by E. TIPPER. —

MAITLAND, N.S.W. — JUNE 27 1901.

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

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

It will be a source of great pleasure, not to say profit, to us when Federation is accomplished fully, especially in the post office arrangements. For instance, in N. S. Wales the ordinary letter postage is 2d, in another colony it is 1d. A letter posted in the latter for N. S. Wales with only 1d stamp on, when it arrives in N. S. Wales is fined 2d for the 1d shortage. Again New Zealand postal notes are not negotiable in N. S. Wales, and to get them cashed, they have to be sent to Sydney to find someone doing business with New Zealand. As far as

the Australian colonies are concerned those difficulties we anticipate will shortly be remedied by all the colonies being under one system. We would ask our New Zealand friends to always send post office orders, *not* postal notes. We have sometimes lost to the extent of several shillings a week by fines on postage and exchange on postal notes. Cheques from other colonies also cost us 1/- each exchange.

Ants don't like either tar or salt.
Bees of all ages go out to make up a swarm.
Some beekeepers renew their brood combs every four years.
Bees never attack fruit until attracted to it by oozing juice.
You may take it as an axiom never to fuss with and nurse weak colonies.
When angry bees follow you make for a dark room.
Among the most simple remedies for bee stings is honey itself.
Robbing is more rife in early spring and at the end of a honey-flow.

The present membership of the N. S. W. Bee Farmers' Association represents over 3,000 working hives.

What a wonderful creature a queen bee must be to produce three times her own weight of eggs in a day.

A mixture of paraffine, beeswax and resin, equal parts is better for sealing than pure beeswax.

Subscribers to the *Australian Bee Bulletin* can have their numbers strongly bound in cloth, lettered in gold on the back, and sent to them post paid for 2/6.

NOTE.—Time of meeting of N. S. W. Bee Farmers' meeting on July 9th, is

two o'clock. There is much business to be done. Will members roll up prompt.

Cries past and present.—"Colour," "Gentleness," "Comb-building," "Non-Swarming," "Honey producing," "Long Tongues."

Those members of Bee Farmers' Association, who intend availing themselves of the railway concessions to attend meeting in Sydney on July 9, had better send applications to E. Tipper, Hon. Secretary at once, as the list has to be forwarded to the Commissioners in time so the various station masters can be notified of the privileges granted, otherwise the privilege may be refused.

Have you read the efforts being put forth for the conservation of N. S. W. Forests. Bee farmers should look them up. Mr. R. A. Price. M. L. A. is the leading spirit. Surely it will pay the Government to appoint beekeepers as forest rangers, or else let them rent small spaces in such forest reserves similar to what the Victorian Government has agreed to—see page 41 last issue.

We are very sorry to have to record the death of Trooper Harry Gaggin, brother of Mr. J. R. H. Gaggin, of Lismore, one of the most extensive beekeepers in N.S.W. The bereaved family have our deepest sympathy. Of the deceased we cannot do better than copy from Mr. Gaggin's letter the following:—

"I should have written some time since to you, but the long fatal illness of my brother invalided from the South African War was the ever unhappy and deplorable cause of much inattention to business matters. In enclosed cutting from *Daily Telegraph* you will see some particulars, but outside his own family, even those who knew him most intimately—much and universally as he was loved here—have but a faint conception of what his loss means. His was a young life highly gifted and accomplished, and of the brightest promise, son of a Medical man (Dr. R. H. Gaggin, my father, of Lismore) and a medical student himself.

He volunteered for the front in January, 1900, when England's fortunes in this desperate war were at their lowest ebb. A rifleman of Australasian fame, though so young, having shot in the Australian Cup Match at Randwick in 1898, in that team of eight picked from the best veteran riflemen of N. S. Wales to uphold our honour in that Intercolonial Competition. Small marvel was it he left with the record opposite his name of the best marksman sent by N. S. Wales to South Africa. Having taken part in 27 engagements, in one of which he received a bullet wound in the forehead, and having endured the cruel hardships and privations of most of the campaign, he was struck down at last by a virulent attack of enteric fever, yet rallied. While apparently convalescing from it at Wynberg Sanatorium, (Cape Colony) Lord Roberts offered him a lieutenant's commission; but that dread disease, consumption, unhappily supervened and ran its usual inexorable course, just allowing the young volunteer to return death-stricken to Australia, but fating him to die there in a Queensland health resort far from his loved ones. Scarred in the forehead by the Boer bullet, though disease slew him, he died—as the Premier, Mr. See wrote to us in our bereavement—as nobly and truly for his country's sake, as though slain in the heat of action on the battle field. Tender and generous-hearted to all, the chivalrous gentlemen in every fibre of his being, and with the mind of a true poet, he died as brave and gallant a soldier of the Empire as ever breathed.

GOSFORD.

J. J. PARRY.

It is said that science at the present time is merely in its infancy. Scientists are ever ready to admit that the accumulated knowledge of to-day is but a speck compared with the infinite mass of knowledge that yet remains to be acquired, that future study and labours will yield to man.

It is seasonable this time of the year to get our honies candied. The question often arises—why is it thus? It is stated by some that this granulation is not its natural state, but I believe its quite as natural as night that follows day.

It is a patent fact that the majority of bodies exhibit a tendency to crystallize, when conditions are favourable. Of course when nectar is gathered it is quite thin, contains lots of water, has to be concentrated by external heat (not heat generated in itself.) This heat has an influence over the atoms, also gives motion to the same, therefore that action or chemical affinity is interfered with which allows the body to crystallize. The property of all atoms of matter is to attract each other, forming molecules. These again are brought in contact with their fellows, forming larger bodies, till we see them in most cases in their solid or crystallized form, this being its natural state under certain conditions, but is very often modified by foreign matter and external circumstances, and honey that is sold that never becomes opaque in the very cold, frosty weather, has been doctored, or is not honey at all. When acid is added to honey it stops crystallization, by altering its composition chemically, but even then its only for a time, without enough is added to completely overpower that affinity of its particles by a stronger chemical one, but that attraction still exists, and whenever it gets the chance to get back to a visible form, by the atom uniting, as I have before stated, and form the geometrical solid, it will.

Of course we know that honey contains several of the sugars, and there is no doubt that cane sugar is in a good proportion; then there is at times starchy matter, and at others perhaps gum, etc., and I think the departmental chemist should be approached on the matter, and let us know all the chemical changes that take place, and what could be done to honey to make it keep its transparency without destroying its properties. I have been watching certain jars of honey in a

shop in Sydney, and after these several weeks of cold weather it has not shown the slightest sign of it ever candying, while other jars from another beekeeper look like fat.

There is one thing that I have noticed. In honey that has been gathered in a heavy flow in hot weather and extracted, usually granulates much sooner than honey that is gathered in a cooler and scarcer time; there is a ferment takes place, when the nectar cannot get rid of its moisture. No doubt acetic acid is formed, which I think is one of the reasons for the honey candying so soon.

It is stated that the plentiful use of honey is one of the best preventatives of the diseases occasioned by worms in children. It has been long supposed to have a tendency to injure the teeth, but this prejudice is now being given up.

Export of Honey.

New South Wales

Department of Mines and Agriculture,
Sydney, 5th June, 1901.

Sir,

I am directed to inform you that a collection of raw and manufactured material is being made by this Department for exhibition at the Imperial Institute, London, and elsewhere. It is thought that this will be a good opportunity for bringing the products of the State under the notice of leading people interested in such matters in Great Britain and elsewhere. The Minister wishes the exhibits to be as representative as possible of the State's resources, and invites your co-operation in the matter. If you can see your way to favor us with any exhibits connected with the industry in which you are interested the Department will be very glad to receive them, and will provide for their transit to England, and for proper staging on their arrival.

I am to add that, as the Department is anxious to complete the exhibit as soon

as possible, an early reply to this communication will be esteemed a favor, should you feel disposed to co-operate with the Department in the matter.

I have the honor to be,

Sir,

Your obedient servant

D. C. McLAUCHLAN,
Under Secretary.

E. TIPPER, Esq.,
Editor, *A. B. Bulletin*.

TO WHICH WE REPLIED PER RETURN.

June 11th 1901.

D. C. Mc LAUCHLAN, Esq.,
Under Secretary,
Department of Mines and Agriculture.

Dear Sir,

Your circular A.01—4850. to hand, and I shall have very great pleasure in doing all I can in the matter. Before I can take any action, I would like your reply to the following questions, immediately on receipt of which, as Editor of the *Australian Bee Bulletin*, and Secretary of the N. S. W. Bee Farmer's Association I will put the matter before the Beekeepers of the Colony.

1. What smallest quantity taken, and in what package? (Say 60lb. tins.)

2. To whom should such samples be addressed?

3. Will such samples be allowed to go to Sydney free per rail?

4. Latest date samples will be received?

Awaiting reply, I am,

Dear Sir,

Yours obediently

E. TIPPER.

N. B.. I take it the "Proper Staging on arrival" will mean bottling, etc. Is it so?

NEW SOUTH WALES.

Department of Mines & Agriculture.
Board for Exports,
40 Young Street,
Sydney, June 14, 1901.

Sir,

In reply to your queries of 11th inst., I have the honour to inform

you that there is no special rule as to quantities of Honey, but 7lb. would be enough for each sample.

Parcels should be addressed to F. B. GUTHRIE, Esq., Department of Agriculture, 136 Lower George St., Sydney, and should be sent in soldered tins. They should be carriage paid to Sydney.

The Agent General will be instructed to have samples properly shown in bottles.

Samples may be sent at once, and should arrive not later than July 1.

I have the honor to be, Sir,
Your Obedient Servant,

Jas. STEPHENSON,
Secretary.

E. Tipper, Esq., "A.B.B."
Willow Tree.

Will N. S. W. Beekeepers do their best to assist the Department in this matter?

In sending Samples, please mention "*A. B. Bulletin*."

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

OFFICERS:—

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REV. HASSELL HALL, M. A.

Vice-Presidents:

MESSRS. F. W. PENBERTHY, T. BRADLEY.

— EATHER

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Will you kindly attend a meeting of above on **TUESDAY, JULY 9th**, in the afternoon at 2 o'clock, at the Board

Room of the Farmers' Co-Operative Co., Sussex and Liverpool Sts., Sydney.

BUSINESS:

The following suggestions have been made by members:—

ADDITIONS TO RULES:

(a) Members unable to attend meetings or conventions be enabled to vote by proxy.

(b) Supply dealers or commission agents may become members, but cannot hold office.

(c) 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 members present own vote.

E. J. RIEN.

(d) That the President shall only hold office for one year, nor again for three years except by a unanimous vote of Association.

(e) Petitioning Government re granting, say, an acre of ground in timber reserve for apiaries, no such grants to be within three miles of any other apiaries.

(f) Union with Victorian Apirarists' Association.

MR. SHAW.

If it is determined that we must have this proposed F.B. legislation, whether we wish it or not, then for choice let us have the services of a bacteriologist when required we have any necessity short of that. If I mistake not there is such a one in the Agricultural Department, in which case a special Act of Parliament is unnecessary.

PRICES OF HONEY.—I think it would be well if a uniform price for honey, both wholesale and retail, could be arranged between beekeepers who sell their honey in the same town or district, and particularly between members of the N.S.W.B.F. Association. Of course the fixing of prices could be made subject to alteration, as such members might consider necessary, to meet varying seasons and other circumstances. Mutual agreement of the kind would do much good from a business

point of view, and much more confidence and friendship would exist between.

It is no use being members of a Bee Farmers' Association, and at the same time doing business in antagonism to each others' interests.

ASSOCIATION CERTIFICATE.—Members be supplied with something in the shape of a Certificate of Association, which might also certify as to purity of honey; or by which members were pledged to sell none but pure honey under penalty.

MR. PENBERTHY.

We must not object to a Foul Brood Act, but object to its present form. I don't think any one would object to two neighbouring beekeepers to get permission from the Department to act as inspectors, providing they had, say, five years' experience.

Is it not well to get some concession from the Government for beekeepers in forest reserves, similar to what the Victorian Lands Department have given, see page 41, A.B.B., last issue.

Are you in favour of proposed Foul Brood Act?

YES.

CROSS OUT

NO.

ONE.

Are you in favour of proposed addition to Rules?

(a)

(b)

(c)

(d)

(e)

(f)

Should you not be able to attend send to any member of committee you know will be there, telling the number of hives you work, and giving him authority to use your votes as per Rule 5.

Only those can vote who have paid their 2/6 subscription.



RAILWAY CONCESSIONS.

Office of the Railway Commissioners,
Sydney, 18th June, 1901.

Sir,

I am directed to acknowledge the receipt of your letter of 15th inst., asking that reduced fares may be allowed to representatives travelling by rail to attend the General Meeting of the Bee Farmer's Association, to be held at Sydney on 9th proximo.

In reply, I am to inform you that the Commissioners have approved of tickets at the single fare for the double journey being allowed only on presentation of certificates signed by you, on the understanding that not less than six (6) representatives travel by rail.

A supply of certificates is being forwarded you under separate cover, and I shall be glad if you will let me have, as early as convenient, on the form enclosed therein, a list of the names of those to whom they have been issued, and the stations from which they travel. Please return any unused certificates. Concession will not be allowed to those travelling less than 25 miles each way.

I have the honor to be, Sir,

Your Obedient Servant,

H. McLACHLAN, SEC.

MR. E. TIPPER,

Hon. Sec, B.F.A.

Willow Tree.

J. HEYWOOD.

3. Are half (Hoffmann self-spacing frames) an improvement on the large frames?

4. Do you advise the use of end spaces (staples), also tin rabbets?

5. Has any new uncapping device been introduced and price?

W. REID.

317.—Monaro, very subject to foul brood when it gets a footing, but few beekeepers here now. Bees black, except about three. Bees have died out through the bee moth and dry summers.

1.—Two years ago my white clover honey was that clear that one could read the *Bee Bulletin* through a 2lb pickle bottle of it; rather acid, candied early, sold readily.

A. A. ROBERTS.

1.—Have had no experience. None in my locality.

2.—On full sheets every time, too much loss with starters, and you avoid drone comb and also get good straight combs that will last 20 years.

3.—They are an improvement for supers, as they are much better and easier to uncup, and the saving of time uncapping more than counteracts the extra handling.

4.—Yes. You do not have so many broken end-bars, and the combs are built out all level, and the beekeeper who does not use tin rabbets is behind the times

5.—Nothing new.

H. L. JONES.

1. Don't know; have none here.

2. Swarms hived on full sheets of foundation, every time.

3. No.

4. Consider end space staples a positive nuisance, and tin rabbets a great convenience in rapid manipulation.

5. No device for uncapping combs has yet been introduced that can equal the Bingham knife. For holding and draining the cappings however the capacious and more convenient uncapping box is far ahead of the better known Dadant can, and will certainly supersede the latter when its advantages become better known.

W. PAC Y.

1.—Have no experience on this question, as none grow here.

2.—Starters are good but I think an assortment of each would be better.

3.—No, they are a perfect nuisance, too much handling. They are not an acquisition to any apiary, they are just as much good as the proposal to have a dummy foul brood inspector thrust upon beekeepers, that this individual is indispensable in the eradication of foul brood, which is all bunkum.

QUESTIONS.

1.—What kind of honey does melilot or sweet clover give?

2.—Which is best. Swarms hived on starters or on full sheets?

4.—I use a plain $\frac{1}{2}$ frame without spacers, inside ends of hive rabbeted, frames then resting on these rabbets, and find them to be as useful a frame as any. The Root-Hoffmann frames are spaced too close for extracting, the combs when capped, are generally too lanky and bad to uncapping.

5.—Not that I am aware of, wish there was something better than the existing device.

J. R. H. GAGGIN.

1. Cannot say from personal experience.

2. Hiving swarms on full sheets of wired foundation is my opinion always pays better. Such swarms get a splendid start having—given favourable conditions—perfect combs the full size of frames in 3 or 4 days after hiving. Besides; swarms of fair strength given only strips of foundation will often build a large proportion of drone combs. Indeed very frequently under such circumstances, the lower third or half of every comb in the hive would be found to consist mainly of drone combs.

3. Have not sufficiently tested these frames to give an authoritative opinion on this question. Mr. T. Bolton, of Dunkeld, Victoria, makes a striking success of the Heddin frame, which is nearly the same size as the half depth Root-Hoffman frame.

4. Tin rabbets I find almost indispensable in manipulating the Root-Hoffman or any other fixed distance frame. Have never used staples for end-spacing of frames.

5. Believe no more satisfactory machine than the ordinary uncapping knife has yet been invented for shaving off the sealing of honey combs. An exceedingly simple device which saves much labour in uncapping is an ordinary $2\frac{1}{2}$ inch nail driven into a piece of $\frac{1}{4}$ inch board, which board is made to fit over the uncapping can or trough the side of board with nail point through binding upwards. The person uncapping places the end-bar of the frame on this rail, and the frame can thereupon be swung round for uncapping purposes with the greatest readiness.—

QUESTIONS NEXT MONTH.

6.—Will you suggest plan for house apiary?

W. REID

7.—Have you ever tried Pure Cyprian Bees, quite pure, and with what results, as honey gatherers, etc.?

QUICK.

8.—I see a commission agent in Sussex Street wash off the labels and put a number on the honey tins. Is it lawful for him to do it without the consent of the owner? If so, what chance has the owner to test the honesty of the agent?

9.—Is it not so important to keep the temperature of our bees down to 45° in winter, as it is to keep the temperature up to 45° in North America to winter to best advantage?

MARKETING HONEY.

“BINNI.”

In your last issue you publish an article from the pen of “Drone” in the *Australian* touching the matter of English Market and Australian Honey. You invite your readers to “have a say on this.” What more can be said? Every word written by “Drone” is probably true. What remains to be done is to act. This, however, is apparently never likely to come off. For some years past, to my knowledge, beekeepers have been talking and writing on this subject, but how much further forward are they? As far as I can see everything has been said that can be said over and over again. Why waste any more time and energy on the subject? During the discussion prices have been gradually declining, and undoubtedly will continue to do so until the vanishing point has been reached and then the industry will be defunct, killed through an overdose of talk, the funeral ceremony being of the shortest description, and the regrets at the death hardly heard at all. “Drone” has to all intents and purposes summed up in a few lines the efforts put forth in the past by the proposed Co-operative Company for Home Markets, and the Export Scheme of the H. R. B. K. Association. Both of these were not thought good enough evidently by the beekeepers at large, consequently we are all in the “as you were” position, with a languishing industry on this side and a large profitable market on the other side of the ocean. What’s the next move? Talk won’t do, that has only helped to bring down prices. Are we beekeepers to sit down and allow a middleman to benefit by all our discussion, take all the fat and flesh leaving us only the bones and skin? It looks like it any way.

Mr. J. R. H. Gaggin writes—Kindly pay in the 2'6 balance as my subscription to your newly-formed Society, the Bee-Farmers' Association; I have some 215 hives. I am heartily in sympathy with its objects, and warmly approve of most of its rules, particularly that one providing for a referendum to the members generally before the adoption of any important measure by the Association. This, the voting power of every member being, as it is, wholly dependent on the number of hives possessed by him, stamps your Association as democratic. It ought indeed to truly represent the beekeepers' interests unlike the *soi disant* National Beekeepers' Association.

W. S., Goulburn, writes—I received the special edition of the A.B.B. yesterday, and was pleased to note the action the Government is taking re export of honey. I hope the experiment will be a success, but am unable to help it myself. Re your letter of the 14th inst., although I will do all I can to help the Association, and would like to remain on the committee, as the honey flow is never any good in Goulburn, I do not feel justified in increasing the number of my colonies at the expense of my honey crop, in order to make myself eligible for election. Much as I regret it, I shall not be able to attend the meeting of the B.F.A. on July 9, since I can only leave my office on public holidays. However, I hope the meeting will be a successful one in every way, and make a decided move in the interests of all beekeepers of the colony. I do not know the terms of the "proposed" Foul Brood Act, so am unable to decide about voting for it. I am certainly opposed to one which provides for Govt. lecturers to travel all over the colony lecturing on bees and foul brood, or for certain salaried foul brood inspectors appointed by the Government at the expense of the poor beekeepers. I think it would be a good idea for an experienced beekeeper or two in each district to be appointed an honorary inspector, to report any cases of foul brood coming under his notice, and the owners of the foul brood bees to be

notified that the disease must be stamped out within a specified time under certain penalties. It would also be an advantage if the Government bacteriologist could investigate certain bee diseases which may crop up, as Mr. Shaw suggests. That new rule re supply dealers and commission agents is not at all to my liking. The commission agents' interests are mostly opposed to ours, as they wish to get the honey as cheaply as possible, and the supply dealers wish to increase their trade, whether the beekeepers prosper or starve. If this rule is passed, one of the main principles of the Association will be destroyed. If it is to be a Bee Farmers' Association, let it consist only of bee farmers. Why should these other men cast their votes against us, and help to destroy our interests? The other rules re voting by proxy are a good idea, but I think ballot papers are better.

Honey Exhibits at the Queensland Exhibition.

The beekeepers of Queensland are to be congratulated for their exhibits in every department of the industry. The district exhibits were well represented Mr. Dunsdale, of Toowoomba, having an excellent display, notably his honey in the comb. The following were the prize winners:—

Comb honey in sections not less than 12 lbs. J. M. Mitchell, Indooroopilly, and A. Gambling, Booval Railway Station, equal, 1; H. L. Jones, 2.

Extracted honey in glass jars, not less than 12 lbs. weight. J. M. Mitchell, 1; H. L. Jones, 2; W. Parry, Silkstone, 3.

Special prize for extracted honey, not less than 12 lbs. weight, in glass jars. J. M. Mitchell, 1.

Hive of Italian bees, to be shown in an observatory hive. A. Gambling, Booval, 1 and 2.

Hives and implements for the apiary. H. L. Jones, 1.



CAPPINGS.

From American and other Bee Journals.

Combs of honey, candied solid during winter, will all liquefy during the following summer if left in the hives with the bees, the heat of the bees and summer doing the work.

A London daily states that "in the course of manufacture of the white granulated grades of sugar, considerable quantities of sulphuric acid are used, to clean the vacuum pans, wash the sugar white, and give it the proper bloom."

The *Southland Queen*, says:--For feeding it "will not do to use a low grade of sugar, as we near ruined our apiaries one year by feeding sugar that was adulterated with glucose." The same journal says:—"We have figured these things out, and find that we can make more money raising bulk combs than fooling with sections."

Louis Scholl draws the bees into sections by using two honey combs in shallow extracting frames, one on each outside of the sections. Having honey in them it does not take long before the bees are up there, and neither does it take long before they commence work in the sections, starting of course, mostly next to those combs of honey.

Don't leave your supplies—your hives, bottom-boards, covers, frames, sections and holders, separators, smokers and everything else that is used in the pursuit—don't leave these out in the rain and weather to be ruined and of no more use afterwards except to go into the stove, making expensive stove-wood, causing a loss and greatly decreasing the profits of the apiary.—*Southern Queen*.

The editor of the *American Bee Journal*, at the Wisconsin convention, in explaining why the prices of comb honey are often put down, told how the small dealer would rush his honey off to market, bring it to the grocer, and sell it at whatever price he was offered. Well, this grocer

would, later, needing more honey, go to a commission man and inquire the price of honey, but he would be met with a figure two or three cents above what he had just paid the small producer. Oh, no! he would not pay that price, for he could buy at a much lower price. The commission man, not willing to lose a sale, cuts the price down to the price of the small producer, with the result that prices fall all along the line.

In uncapping, have a strip of wood 1 x 2 inches in size fastened across the top of the uncapping can. In the centre of the strip, from the under side, drive an eight-penny nail up through the strip, allowing the point to project above the wood far enough to afford a resting place for the end-bar of the frame of the comb to be uncapped. Upon this point the comb may be tilted to any desired angle, and quickly reversed for uncapping upon the opposite side, without lifting the comb. This arrangement also prevents the frame from slipping about while the comb is being uncapped.

At the time supers were required I adopted what, to me, at least, was a radical innovation. Instead of leaving the brood in the hive as nature had arranged it, the eggs and unsealed larvæ in the middle of the arrangement were entirely reversed, and the eggs and unsealed brood put at the extreme outside of the hive. I reasoned thus: These eggs and young brood cannot get out of these combs inside of 16 to 20 days, and, therefore, the bees can put no honey in them, and the ones in the middle of the hive they will be loth to fill with honey because the queen wants them for egg-laying; so they will, of necessity, put all of the honey above in the sections and the sequel proved the correctness of the position.

NUMBER OF EGGS DEPOSITED BY A QUEEN.—The Baron Berlepsch, in several different experiments made to find out how many eggs are daily deposited by the queen bee, discovered that she laid

1604 eggs in twenty-four hours as the result of the first. In the second, she deposited on an average 1913 daily for a space of twenty days. In the third one, an average of 2400 daily was found for the same length of time. In the fourth, she deposited 3021 in twenty-fours. She was seen by him to deposit six in one minute. Later experiments with two and three story hives, go to prove that a queen actually lays as many as 5000 eggs during every twenty-four hours for a period of a week or so. And yet, wonderful as this seems, it is doubled and trebled, if not more than this, by some of the queen ants.—*Progressive Beekeeper*.

I did say that bees' jaws were not suitable for biting the skins of the fruits, and I still adhere to the statement. While the bees seem to lack the power of biting through chitinous substances, yet they will unravel and pull to pieces any filament or fabric just as we can with our fingers unravel and pull to pieces the strongest hemp rope if we take time enough. If you will examine under a strong magnifier the filament of a cocoon you will see it is made up of a web. These individual webs can be easily unravelled and pulled away by the bees, and it would be a very easy trick to remove the cocoons in that way. But the skin of a peach or grape has quite a different texture and surface. Nothing short of cutting instruments would pierce them.

Mr. Barber, writes in *Gleanings*:—When I find the queen I rest the comb on the edge of the hive and hold the upper end of it in such a way that the comb slants a little away from me. When I can get the queen near the centre of the comb I start her toward the upper end of it; and by following her with my scissors I slip the blade under her wing as she runs, and take it off smooth and clean in much less time than it would take me to catch her in my fingers. One soon gets used to following her motions with the hand, and after a few trials the clipping can be done nicely

without even touching the queen except with the scissors. I don't believe they know what has happened, or that anything has happened, judging by their actions. One needs a pair of embroidery scissors, and they should be keen and sharp.

I have hives in the home apiary that have been in constant use in the weather for 18 years, and not a single leaky lid in the apiary. Whenever a lid checks, take a good quality of shingles, paint them well, then shingle the cover; and all the better if you give them a good dose of paint afterwards. This kind of a cover will outlast a new one. If the lids are flat nail a cleat lengthwise down the centre, shave the corners of the cleat with a plane, also the edges of the cover—that is, the eaves; then shingle as you would a gable cover, and you will have a small air-space left under the shingle cover, which makes a cooler cover in hot weather. The cleat can be one, or even two, inches thick.—EUGENE HAMBAUGH.

In the *American Bee Record*, Mr. J. H. Johnson gives some experiments with black brood, the cure for which seems similar to what is required for foul brood. The following are his results:—Not a single colony that retained its queen and unsealed brood recovered. Every colony made queenless and was deprived of its unsealed brood, though retaining their old brood-nest of comb and honey, recovered. DEDUCTIONS: 1st. That the malady is not retained by the mature bees, but with the unsealed brood and with a mixture of honey and black-broody matter gotten by straining or extracting combs containing unsealed brood. 2nd. That colonies with no unsealed brood can use up black-broody honey and cleanse their combs of decayed black-brood, after which they can raise brood and build up. 3rd. That honey stored by black-broody colonies seldom, if ever, by itself alone, carries the disease.

In speaking of the experimental apiary in the Garden of Luxembourg, Paris, Mr.

Dadant says:—It was a disappointment. The spot is unique, for an apiary in the heart of one of the largest cities in the world. It is a very quiet corner, among the trees, the shrubs, and the flowers, in the aristocratic garden of the palace of the French senate, and the bees fly back and forth unmolested and busy. But there are only a few hives, in a rather dilapidated condition, and it is evident that no pains are taken with them. The keeper very kindly permitted us to look at every thing. We found half a dozen different practical hives, rotting without occupants, while half a dozen straw skeps and two or three odd patents seemed the only experimental feature. I enquired for an observation hive, and he showed me a hive with eight or nine frames with glass all round. What one could observe, with such a hive is more than I could say. I was told that lessons in bee culture were given every two weeks, in this place during the summer. I doubt that any experiments of value are ever made there. France can afford something better.

—*Gleanings.*

Elisha Gallup, when speaking of a winter in Upper Canada says, 'the thermometer for sixty days in succession was not above 10 deg. below zero, and for eight of these days the mercury was frozen; yet my bees, in box hives, with a two inch hole at top and the bottom, plastered up tight, came through in excellent condition.' To test more thoroughly this matter of bees freezing, I took a colony one evening when the mercury stood at ten below zero, and suspended the hive about two feet from the bottom board, taking off all covering from the top of the hive, so they were the same as if hung in the open air, as the colony was so small that it did not touch the hive at any point. They were left thus all night, during which the mercury went as low as 16 degrees below zero, yet the next morning the bees were all right though I really expected to find them dead. Since then I have come to the conclusion that the freezing of a colony

of bees when in a normal condition is an impossibility, and that the finding of bees dead and frozen only proves that the freezing was an effect coming after death produced by some other cause than zero cold, such as starvation, bee-diarrhoea caused by a long confinement, etc."—DOOLITTLE in *Gleanings*.

Sweet clover or melilot grows over five feet high. In Australia it is reckoned a weed, but some Americans say the hay from it is excellent. It is a wonderful honey producer. Rev. E. T. Abbott says in *PROGRESSIVE BEEKEEPER*:—By the way, let me tell you how to cure sweet clover for hay. There isn't over one farmer in three hundred that knows how to cure sweet clover for hay. He thinks the sun ought to cure it, but it burns it, it doesn't cure it. Let it cure itself. The leaves have pores, and the stems have not. There is no chance for moisture to evaporate out of the stems, but the leaves act like pumps, and they can pump the moisture out of the stems. If you want to cure sweet clover, and do it well so that it will be of value as hay, do not cut it down and let the hot sun dry it; the hot sun immediately destroys the action of the pumps. Don't do that, but put it up in the shade so the winds can blow through it. The leaves will keep green, and those leaves will go to work and pump the moisture out of the stems; and as soon as they get their work done the stems will be dry, and you will have hay that anything will eat, and that is the only way to make hay of any kind. Nine-tenths of the hay that comes into the markets in large cities is not fit for anything to eat. Any man ought to be ashamed to bring lots of it to market, yet the farmers are making that kind of hay all the time. You can't cure sweet clover any other way than by letting the leaves pump the moisture out of the stems; they are so large that it won't evaporate.

The following letter, relative to the big bees of the Philippines, was sent to *Gleanings* by Mr. J. Woodhouse, of

Dubuque, Ia. It was written by his son N. E. Woodhouse, an American soldier in the Philippines.

Dear Father:—I have something to tell you which I know will interest you. On the 15th a large swarm of bees came here and lit on a tree about 40ft. from the ground. They were the first I had seen here, and I was determined to hive them; so I got a ladder that reached them, fixed an old rough box in readiness, and put on two pairs of gloves, and some mosquito-bar over my face and took a rice-bag up, slipped it up over the bunch, crowded them off the limb and got them almost all into the bag, closed the bag, and brought them down as smoothly as could be. About 200 natives had gathered to watch the operation, but were very careful to keep away. They never saw anything like that; and the soldiers thought they were going to see some fun, but did not see it. I could not get them into the box out of the bag, so I shook them out on the alighting board, and they went up into the tree again. I went up and brought them down the next day, but could not get them into the hive. They went back into the tree, and yesterday they left and went close to the hospital, and went into an old building. I cut a round hole in a box and slipped it up over the bunch, crowded them loose from where they hung, put a board over the hole, and had them in a nice comfortable home with honey to eat which I had bought out of the sales commissary. To-night I took the paper out of the entrance at sundown and gave them their liberty, and they immediately came out and lit up under the eaves of the church. I believe they will go to work there. All that I used to know about hiving bees in the United States has failed to work here; i.e., so far as I had the wherewith to work with. They simply will not stay in a box. They are a beautiful bee considerably larger than the Italian. Instead of having the yellow stripe they have a silvery white stripe with the black. If I could have got them to work in the common box I would have made a moveable frame hive, and rear'd some more queens and sent the queens back to you; but I guess I shall have to give it up for the present.

The World's Supply Of Timber.

Thirteen European countries are importers and five are exporters of timber. Great Britain, Germany, and France, head the list of the former, Russia, and Scandinavia being the leading exporters. European timber imports exceed exports by over 2,600,000 tons annually, and the demand is constantly increasing. During the last 35 years British imports of tim-

ber have grown at an average rate of 139,000 tons, and the price has advanced even more rapidly. The latter fact alone may be taken as an answer to the second question, but there is without it ample evidence that in some classes of timber the limit of supply has very nearly been reached. In Russia and Scandinavia the supply will probably soon begin to fall off. Even the exports from the great lumber-producing districts of America do not make up the European deficit, the balance of which comes from such countries as Madagascar, Siam, and Java.

The conclusion arrived at by Dr. Schlich is that so far as coniferous wood is concerned the danger of deficient supply is almost at hand. And this is the class of wood that shows the greatest increase in consumption. The manufacture of paper alone accounts for an enormous quantity of the timber, and its consumption with cellulose and similar materials continues to increase very rapidly. The paper-makers, impressed with the danger of a falling-off in the quantity of wood available for pulp-making, have set on foot experiments for the discovery of suitable substitutes, but so far with indifferent success. To some extent a shortage of the supply of harder timber used in building construction and the arts can be averted by greater use of other materials, but in the end the result is the same. If proper methods of preserving the existing supply, of economically using it, and of providing of its replenishment are not followed, a timber famine is tolerably certain at no distant date. The results of such a famine must necessarily be serious.

Fortunately there are means of postponing the evil day—possibly of averting it, altogether. Authorities are unanimously of opinion that there has been much waste in the past. America and Canada, which supply a very large proportion of the European deficit, have practically pleaded guilty to former recklessness and prodigality, and have taken protective measures. Australia is almost the only other country that will be in a position to

supply the world's market. Hitherto there has been a disposition to lament the fact that our exports of timber were not so large as they ought to have been. But wholesale exportation, with no provision for the restoration of denuded forests, is economically unwise, and there is consolation in the fact that we have a valuable asset almost intact. The position of the world's market seems to tend to the direct advantage of this country. The development of our export trade in hardwoods will proceed coincidentally with rising prices, and a better return is ensured for the product. The Commonwealth is just as much concerned in the old-world shortage of timber as it is in the deficiency of wool and wheat. Australia has plenty of spare land, which, under scientific afforestation, would produce a valuable crop, sure of a certain market. Although soft timber grows rapidly, the return may appear too remote to tempt business men, but the Government of this State, which receives about £12,000 a year for timber licences and royalties, might supplement the official efforts to regulate the cutting of timber by spending some of the money in planting trees on unoccupied land. The policy of the English landed proprietor who always carried a pocketful of acorns about with him, and planted one where-ever he saw a waste space on his estate, might be followed in this country to its future advantage.—S. M. HERALD.

✻ CORRESPONDENCE. ✻

W. B., Jr., Liverpool, April 22:—I have had a tremendous struggle since starting in the beekeeping business and have just managed to keep out of King street. You know, I expect, by painful experience, how dull the honey market in Sydney has been for the last two years, and yet there are those all over the coun-

try still stating that they can get 4d per lb. for all the honey they can produce, and trying to increase the number of beekeepers.

J. J., Ramornie, April 30 :—I notice a lot of dead bees on front boards each morning lately, from white young ones up. A friend complains of the same thing, mostly young bees with him. With me, only hives here and there seem to be in trouble. My friend says, at times he has had them inches deep, I never had any trouble that way before. Turned very cold suddenly here lately. Would like to hear a little from some one through the "A. B. B."

[Have you been late in preparing your bees for winter? The brood has been spread. Cold has come. The bees have clustered and left the brood, which has in consequence got chilled. See the entrances are contracted, and there is warmth retaining oilcloth, newspapers, or chaff bags at top of cluster.]

J. A. C., Kendal :—Enclosed find subscription for A.B.B. for another year. I almost forgot you. I have been so very busy lately, my bees have done first rate again. They were very slow in making a start. I thought the season was to be a failure, nearly Christmas before I saw any honey coming in, I had a lot of trouble in keeping them from starvation. I happened to keep a number of full combs or I would have had to tell a different tale. I think I can dispose of all my honey locally. There is very little sale for honey here till the cold weather comes on. No fruit then and less jam making. Hoping you had a favourable year. With kind regards.

J. A. B., Dilga, April 24 :—The season here has been a failure. I got only two 60lb tins this year and the bees have barely enough to carry them through the winter, about half of mine have died out, and I could not rear a queen to increase with, and besides it was no use to increase as there was nothing to gain, and I would only have to feed them. It is the same all over this district. Re the Foul Brood question, there is no foul brood in this district, and the apiaries are not near enough to each other to infect

if any of them had the disease. We do not want a foul brood Act here, for pity's sake let us have a few bees without paying a tax on them, for that is what an Act means.

D.M.M., Deep Lead, Vic., Ap. 24 : I am still among my little friends and have reason to be satisfied with their work for the season, which has been a very good one with me from October till end of February, but March and April have been poor. As a rule we get a good flow in March and April, but our rains have been late this year. We have had nice rain now, about an inch, and the bees seem quite lively since. It does the bees a world of good. One of our neighbouring bee-farmers, Mr. Couzens, who was this time last year busy among his bees, I hear has gone and left them all behind, and worse still a wife and family. It seems hard to go and leave them all behind.

[Our deepest sympathy goes out to the widow and little on-s.]

"Honey-Comb," Victoria, 27th April, writes :—I brought *one* hive here (a very small swarm) to test this place. It happened to be free from disease. It has to my great pleasure done splendidly. It has five frames full, mostly of sealed honey-comb, snow white, and is much larger than when brought. I think it has enough to winter on as it is not large. I have found that there are two species of gum trees (eucalypts) which though resembling each other are not identical, and bloom at different times. These with stringybark trees have kept a continuous bloom all through this summer, and about 10 acres of a thistle paddock have helped. This place appears, in a good season, at least to be capable of producing a good honey yield—not for a beekeeper—but for an amateur. If I had had a large hive right through the summer, I'd have had a deal of good honey, without doubt, for my own use. I did not expect such a good result, as prior to bringing the swarm I was advised that it was a poor place and found that most people who had had bees had lost all of them.

Not a bee was to be seen on the flowers. I believe that it was through want of knowledge, as no frame hives were kept, and I presume that in bad seasons, the hives were robbed of their stores and left to starve. The hive I have has not a moth in it, and not a dead young bee in the cells. This is pleasant to think of as my last lot kept me continually on the go through diseased brood.

J. S. D., Fairfield, May 21 :—Always throwing the "Bulletin" on one side of course, I did not see question 317, or I certainly should have sent a reply. I have carefully read the issue of April 27th, and regretfully I find that foul brood has a very strong hold of this State. Paul Moorfield gives a terrible statement; Loyalstone's six year old son says the State is certainly reeking with it. Children generally know as much as their parents, such having sharp ears. J. T., reports foul brood and paralysis from Rylstone; J. C., Bulli, reports it from there; I saw it a few months ago at Port Macquarie; out of 118 colonies I had at Rylstone, it wiped out to twenty-three, and the district around the town is rotten; I also saw it Armidale a few years ago. So much for this State. On page 10 last "A.B.B.," Beuhne says of Victoria, foul brood is prevalent, therefore I am satisfied it has a very wide range. Being very intimate with W.T., Rylstone, he has my sympathy. You certainly give him a cure for the disease he has, but you religiously say nothing about the diseased bees his had been robbing.

E. J. M., Singleton :—Just a few lines to let you know that I am still alive and kicking and still taking an interest in the bee line. I called to see you some few weeks ago as promised, but was very disappointed to find that you were away from home. Nevertheless, I took a glance in and around the bees. I notice there is a great deal of talk going on about foul brood in N. S. Wales. I am well acquainted with many beekeepers from Singleton north to Werris Creek, and I have not heard one complain of this dis-

ease, their bees in most cases being in a very healthy condition. The only thing I have heard them speak of is a few cases of spring dwindling. I myself have about 20 colonies, and are all in good healthy condition with the exception as I have above mentioned, a little dwindling in spring time, and I know of several others who are beekeepers and the only thing they complain of is no honey in bad times. I may say that I got no honey from my lot till after Christmas, and only one flow at that, just while the ripe fruit was in, the weather being too dry all the season. There was no blossom for them to gather from, yet my lot are going into winter nice and strong, with a good supply of stores as I did not rob them too close. I get my "Bulletin" very regular and am still pleased with it. I have heard some call it the scrap book, but I was not aware it had a second name.

J. S., Townsend, May 21:— I am sorry to see by Mr. Gale's report that foul brood is so bad in this state (perhaps he means "fowl brood.") I have not seen or heard of any in the Clarence River district, but there may be. I have a cure for it, but fortunately for me I have never needed it. Some 19 years ago when I commenced bee-keeping in England, a friend of mine (who had started about two years before) purchased a second hand hive "cheap," for hives are dear in England. This one cost new 27/6, he got it for 7/6, only been used a year or so. Well, a few weeks after putting in a swarm it developed foul brood. He found out after that the previous owner's bees had all died out. He soon cured it by the following easy and simple treatment, and would some of your readers be good enough to try it, and let us know the result through the "A. B. Bulletin. Calvert's Carbolic Acid No. 5 mix thoroughly in a bottle, with a wide mouth, such as a pickle bottle, from three to four tablespoonsful with one quart of water. Not more than four, that is one spoon to half pint water. Then with a small brush (sash tool we call them them)

apply it or paint the inside of hives, especially the corners, and spray some on the combs, not too much at a time or all the bees will clear out of the hive, and I think after a few applications it will disappear, at least it did in this case, and never showed the least trace of it afterwards. At any rate it would not cost much to try it. It should be done two or three times a week. No beekeeper, if he knew the uses of carbolic acid would be without it. I always have it on hand. I use for ordinary purposes about 2ozs. to quart of water. Just try it for driving bees, hold the brush to them and they will soon clear. To quieten them, get a piece of flannel a little larger than quilt, sprinkle it with this solution, place it on section crate or top of hive, and see how soon they will quieten down. When lifting quilt have the brush in hand, paint top bars, and it will help to keep them down; also if you should get stung (and beekeepers get stung sometimes), there is nothing better than this for a cure, or for bites of wasps or any insects. It is one of the best things for cleansing wounds, a few drops, say a small spoonful of solution in water, and also many other purposes. It will kill the bee moth or rather the grub of a bee moth. This is one reason why I am never troubled with bee moth, and they are very bad in this district. Some thirteen or fourteen years ago, Mr. Webster introduced a fumigator to be used instead of a smoker. It certainly quietened the bees, but it did not answer as well as a smoker when bees were flying. It was an ordinary smoker with cotton wool soaked in Carbolic Acid put in the nozzle of it, but like many other inventions in beekeeping appliances they are made to sell, not so much to use.

NOTICE.

MR. R. BEUHNE, Tooborac, is appointed Agent for Victoria for the AUSTRALIAN BEE BULLETIN, and is authorised to receive subscriptions and advertisements for same.

E. TIPPER.

VICTORIA.

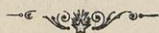
TO THE BEEKEEPING FRATERNITY.—Friends, I am still breeding and selling choice Italian queens. In fact I am devoting most of my time to this branch now. Having sold my dairy herd I intend making queen breeding a specialty. I import fresh breeding queens every season and from different places, so as not to inbreed (a great factor, I think, in preventing foul brood.) My bees have averaged me over a cwt. surplus honey each colony past 12 seasons (summer count.)

Prices as follows. Satisfaction and safe arrival guaranteed.

	One	Three	Five
Untested—	5/-;	13/-;	20/-
Tested—	8/-;	22/6;	35/-
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VICTORIAN CONVENTION.

BEE PARALYSIS.

Mr. W. L. Davey said, I have had rather expensive experience with this disease at the end of last winter. Owing to the prolonged winter the bees ran out of winter stores. To prevent them from dying of starvation they were fed on sugar syrup until October, the first batch of spring brood being raised on sugar syrup only, the spring being so wet that no new honey was gathered until well into October. The adult bees that had lived through the winter months showed no signs of the disease, but as soon as the young bees were old enough to take the field they developed paralysis in all the colonies fed on sugar, the odd half dozen colonies that showed no disease were those that had sufficient capped stores to pull them through the unusually wet spring.

With the advent of warmer weather and a flow of cape weed honey the disease disappeared in the next round of brood, the same being noticeable in every colony but one, which retained the disease until December, when the queen was destroyed and the colony united with a healthy one, since which time no paralysis has been apparent. The speaker further said, from the past experience, he was confident that he could produce the so called paralysis by a combination of the conditions he had mentioned and sugar syrup fed to them at the time of brood rearing, or any honey food not thoroughly ripened would result in paralysis, which, he thought, was not the true paralysis, but a bowel disease which had cost him a loss of at least £100 during the past season, as the colonies of bees did not gain in strength until January, when the main honey flow was past.

Mr. Bennett said that his apiary was never free from a species of paralysis, which had cost him at least £1,000 during the last 6 or 7 years, as his colonies were depleted of so many field bees that his honey crop was materially affected thereby.

Mr. Jackel mentioned that he had some experience with the disease, which he cured by requeening the hives affected by paralysis.

The Chairman remarked upon the various characteristics that the disease appeared to take, the disease which in Australia was known amongst beemen as paralysis might be entirely different from that disease. There were apparently two diseases known by the one name. The so called paralysis may be a very serious disease, which seemed to be a very aggravated form of what was known as dysentery among bees, the true paralysis possibly being an entirely different malady. It was, therefore, most important that we should know if the disease referred to was a constitutional one or whether it was caused by the food being unsuitable.

A sample of paralysed bees was then examined by those assembled and it was decided by the conference to bring the matter under the notice of the Minister of Agriculture, by means of a deputation.

MARKETING HONEY.

The report on honey sent to England by Mr. Beuhne per favour of Mr. Longman was placed before the Conference. The samples were, yellow box honey, stringy bark honey, and a suburban honey. The report read as follows:—

AUSTRALIAN HONEY.

Mr. S. Longman has given me an opportunity of examining three samples of Australian honey, and has asked me to put my impressions thereon in writing. I have not tested this kind until now.

To distinguish the samples for the purpose of these remarks, I will call one the light, the other the dark, the third the small sample. I take it that all were pure unsophisticated honey, merely extracted from the combs.

They were of great sweetening strength and I should place the dark as the strongest in that respect, then the light,

and the small the last. Of course, this difference may have arisen from difference of the time of year when taken from the bees.

Comparing with English honey I think the Australian has the greater sweetening force.

There was no indication of crystals or candying in the samples. In fact, what may be called the texture seemed to have the fibrous or glycerine-like quality in its perfect smoothness. It was rather more glutinous or tenacious than British, Swiss, or American honey usually is.

This might arise from its condensed sweetness, owing to the honey having been gathered in a hot climate and so to have lost some of its watery constituents, by the action of the dry hot Australian atmosphere.

We find in our cooler and moister land, that the honey gathered in a cold season is thinner and lighter than that obtained in a hot summer.

Comparing these honies with some English samples I found the smell of them very distinctive. The Australian had a heavy acid odour, the English a sharp pungent smell. I have tested several lots of English honey for this quality—or defect—and each yields this malice or acetic acid effect, mixed with a slight scent of flowers.

All the three samples of Australian honey have also their distinctive odour, which to me appeared like a heavy pyroligneous or wood acid smell, not so pungent as in the English honey, but unmistakable.

Probably those accustomed to the one sort, would acquire a preference for that on which their tastes had been formed, Australians preferring their own richer honey to other lighter sorts which we on this side of the equator have and like best.

I have found that the strong heavy honey gathered in the height of the season keeps better than the clear, early, light spring honey, though the latter is the nicest to eat. I am inclined to think that Australian honey would also be

nicest when taken early in the season. I must discount the value of my remarks on the Australian product, by the fact that these samples are the only ones that I have examined.

Signed JOHN HIGGINS,

Pylee, Somerset,
England, 10/7/1900

In answer to to the Chairman, Mr. Longman said that the opinions of some English people who had tasted the honies were, that the stringy bark honey tasted "physicy," and was not liked. The yellow box seemed like sticking gum and had a sort of bee flavour, whilst the suburban honey (probably cape weed) was most liked of the three.

Mr. Beuhne thought it was merely a mechanical difference, we ourselves noticed a difference in thin, dense, or very thick honey, although it may be all similar honey. Then, again, a honey liquid and the same candied seemed entirely different honies; some liked one, some the other, and yet the only difference was he thought a mechanical one, and this would probably account for some of the opinions expressed on the other side of the globe.

Mr. Freeman had a sample of cape weed honey, which he had shown to a person newly arrived from England, and he said it was a beautiful honey in his opinion. Referring to local marketing he knew of a firm that retailed about 300 tins per annum direct to the public when honey was cheap, but when it was up to 4d on the wholesale market, they practically did nothing.

Mr McFarlane had sent a ton of honey to England as an experiment; he hoped soon to have a favourable report regarding this trial consignment. He also stated that he had received a section of honey comb from England, which appeared to his judgement to be about equal to our cape weed honey.

Mr. Jackel mentioned that he had also sent some honey to England which was gathered from Peppermint trees, the reports he received stated that the honey

was greatly liked by those who sampled it.

Mr. Cox asked the Conference if it would not be a good plan to make up a presentation case of Victorian honey to the Duke of York, before he left the State, he thought it would bring our honey into prominence.

The members decided after a full discussion that it would not be practicable to carry out the very good suggestion made by Mr. Cox, because the space of time was too limited to allow of the gift being brought up to the high standard which the occasion demanded.

It was decided to close the Conference as soon as the election of officers had taken place, which resulted as follows:—

Moved by Mr. Cox, seconded by Mr. Beuhne that Mr. Bolton be re-elected President. Carried unanimously.

Mr. Bolton returned thanks to the Conference for re-electing him, and hoped the Association would always prosper. In his remarks he said that if ever the Association became a power for good amongst beekeepers, and he thought it would, the best thanks of the industry would be due for Mr. Beuhne's share in that work, and likewise the Secretary, Mr. W. L. Davey. Applause.

Mr. Bennett nominated Mr. R. Miller as Vice President; Mr. McFarlane nominated Mr. Freeman as Vice President, both gentleman were unanimously elected to the dual position.

Mr. R. Beuhne was unanimously re-elected correspondent. The Chairman thought they could not do better than re-elect Mr. W. L. Davey as Secretary and Treasurer, without a motion. Applause.

The Executive Council was formed by electing the following gentleman as members. Messrs. Jas. McFarlane, Beuhne, Cox, V. R. Davey, President, Vice-Presidents and Secretary.

The following gentlemen were elected as an advisory committee.—Messrs. Penglase, Smith, Buck, Geo. McFarlane, Willyan, Jackel, Bennett, Garrett, Duncan, Bassett, Hallam and Murray.

It was resolved unanimously that the *Australian Bee Bulletin* should be the official organ for the ensuing 12 months.

The Conference was terminated by those assembled rising in their seats and singing the National Anthem.

The Technical education given by Mr. R. Beuhne in showing and explaining labour-saving appliances, at the close of the Conference was a real treat to those who were fortunate to be present.

MY NOTE BOOK.

BY W. L. DAVEY.

The Conference was a decided success.

The feeling that seemed to take possession of the beekeepers was one of earnestness.

Let us hope that same feeling will exist all the year, and may they be just as earnest when at their neighbour's apiary, and may they not forget the members fee is only two and six a year.

The question may have been asked where was friend Beuhne during the spare moments of the Conference? It would be as easy to find a black queen, one had only to look at the swarm of beekeepers in a cluster at one end of the room, and sure enough the King bee would be found in the middle, with frames and foundation comb, appliances of all descriptions, and more things than I can mention, whilst the family took their schooling with evident pleasure and satisfaction.

The telephone started ringing just afterwards, and I could not remember all of friend Beuhne's short cuts and dodges, but the conversation was as follows:—

Is that Mr. Tipper of the *A. Bee Bulletin* Office?

Yes! Mr. Tipper is speaking.

Oh! is he, well good morning to you, sorry to have to trouble you, but just dot down in next "A.B.B.," that W.L.D. has a report of two Deputations to send in for next issue; that he has discovered two tons of spurious beeswax is on sale in Melbourne, and may have to call the Apiarist's Executive Council together to stop it. Do you think we ought to pro-

secute the vendors of same, if they sell us some of this as pure beeswax?

Hello! Are you there?

Yes!

Well, what do you think of it?

I'll tell you in next. "A.B.B."

Thanks. Are you there Tipper? don't ring off,

Yes! I am here.

Well, just give my compliments to the Bee-Farmers' Association, and tell them to think over Federation. It would be so easy to unite the two as the subscription is only 2/6 to either, and may we get a bucketful of half-crowns.

By the way, the Silk Show of our industry was held last month. The immense success that attended their efforts, might well cause them to go into voluntary liquidation for very joy, live on the dividends, and be at peace with beekeepers evermore. After deducting deadheads, woodenheads, blockheads, and a small contingent of free Lancers, the attendance of the general public could just about be counted on the four fingers of each hand—to be generous they can have the thumbs in as well.

Hello! Is that the exchange?

Yes, times up!

Oh, just one more minute?

I suppose I must ring off Tipper, but I must mention one more thing. They had a lecturer on beekeeping, who said he was not one of those that put a ring round themselves, saying we have a good thing and don't want anyone else to know; he said, he did not belong to the class of people who were selfish, and wanted everything for themselves he had no sympathy for such people.

Well, Tipper, this is the sort of thing that is to lure us into the bosom of silk-dom. I think we have grown our wisdom teeth during the last two years, and as they are fairly sharp we may be induced to bite a bit more than skin deep, eh! and once we get a fair grip, there'll be nothing left but a little fur, a skin, a leg, a bone, and a very much alive bull-dog.

Gentlemen "time's up! Ring off please

Good-bye Tipper, all sorts of success to "our companions in arms."

Hooray, friend Davey, that union will not be forgotten at our coming conference.

We are sorry to hear Wax adulteration is being carried on in Victoria. The material used is paraffine and coloring. A. I. Root, in *Gleanings* gives the following recipe for detecting wax adulteration: "The specific quantities of the ordinary commercial paraffines and ceresins are below that of beeswax. An ordinary article of pure beeswax is lighter than water (wax standing 965 and water 1000) of course it will float when a piece of it is put into that liquid. Into a jar partly filled with water we will now pour in alcohol until small piece of beeswax of known purity settles to the bottom, taking care not to pour in too much alcohol, for we want the wax to sink just to the bottom, that is, we desire the alcoholic liquid and the wax to be of the same specific gravity. Now then, we put in a piece of adulterated beeswax, containing, say 50 per cent. of paraffin or ceresin. The chunk will float on the surface of the liquid. We will now take another piece of wax that contains only 10 per cent. of adulteration. It still floats, but has a tendency to sink almost under the surface. If we take another piece containing only 5 per cent., it may float or gradually settle to the bottom of the jar, perhaps standing upon a single point.

VICTORIAN NOTES.

R. BEUHNE.

Work for the month in last issue contains some items on which beekeepers greatly differ—I mean hive covers and winter packing. In regard to the former I have the satisfaction of never having any cracks to putty up, and little or no painting to do. After trying every kind of hive cover in existence, from a sheet of bark upwards, I have finally settled on a gable roof, covered with plain galvanized iron for home apiary and a flat cover also covered with galvanized iron for moving. I find that a well-made cover, even if a little more expensive in its first cost, is the cheapest in the end. I have gable covers of various designs, each consisting of a flat floor of $\frac{1}{2}$ in. boards, and an outer pitched roof of $\frac{1}{2}$ in. or $\frac{3}{4}$ in. boards, raised 3 inches in the centre. The floor is held together by a frame consisting of the gables, cleats at eaves, and a ridge piece of hard wood supporting the roof in the centre. This frame is slightly larger than the top of the hive, and rabbetted out to telescope $\frac{1}{2}$ in. down over the hive, thus leaving no

joint exposed to the weather for water to soak into it or into the quilt, where one is used. I have 100 of such covers, with the roof boards of redwood, and they are satisfactory in every way, except that they want painting at least once every season on the upper surface. I have also a number covered with Baltic, and some with American pine. These cracked badly, and I covered them with plain galvanized iron, and find that although slightly more expensive in the first instance, they require no painting on top, and only have to be painted once in two or three years at gable ends to keep in perfect order. Many beekeepers, for various reasons, prefer a flat cover. A flat cover perfectly water, fire, frost and heat-proof, which does not warp or require painting, may be made out of a kerosene case, costing 3d. or 4d., and plain galvanized iron, costing about 6d. per cover. To make such a cover break up the case, cut three 2in. strips out of one head to form the cross-pieces inside the cover, one at each end, one in the centre. On to these nail enough of the sides of the case to project $\frac{1}{4}$ in. each side of the hive. The cover is now a thickness of $1\frac{3}{4}$ in., flat on top and bottom, with three cleats and two air-spaces between. On to the four sides of it nail 2 $\frac{1}{4}$ in. strips of the thin boards, projecting $\frac{1}{2}$ in. below to overlap the top of the hive. For galvanized iron I use No. 26 gauge plain galvanized iron, 72 x 30in. sheets for eight frame hives, or 72 x 36in. for ten frame. Cut the iron larger than the cover by one inch all round. Cut open at the corners, one inch deep, and by means of a piece of wood having a saw kerf one inch deep in it, turn one inch at right angles on all four sides, the iron is now slipped over the cover and tacked on all round. To make the cover still more impervious to cold and heat, newspapers, 20 to 30 layers, may be inserted between the iron and wood. Each sheet of iron will cut six covers. No paint is needed excepting on the wood where exposed. Galvanized iron is more durable than zinc, and does not buckle nearly so much. Several

large beekeepers have adopted this sort of top, and speak of it as the first really satisfactory hive cover.

After trying oilcloth and all kinds of other material, I find that wool-packs or grain bags cut to size, and slightly starched and ironed make the best quilts in connection with this cover.

HONEY AND ITS AROMA.

"Practischer Wegweiser" for May contains an article on honey and the scent of flowers from which it is gathered. The writer, Mr. Valentin Wust, states that as the result of years of experiments he finds that the alkaloids and essential oils of plants are present in the nectar secreted by the blossoms and gathered and stored by bees. For the purpose of testing the honey of poisonous plants, Mr. Wust cultivated these on a large scale, and with great perseverance and patience gathered fairly large quantities of nectar, by means of the capillary attraction of fine tubes. By distillation, filtration, etc., he obtained the pure alkaloids and tested them in their action on human beings and bees.

When the nectar is gathered by the bees themselves, these alkaloids are at once changed as they come into contact with the secretions of the glands of the bee, or neutralised by essential oils and formic acid and the honey has no injurious influence on the human system whatever, on the contrary, the author is of opinion that they impart to the honey valuable medicinal and tonic properties.

Incidentally, Mr. Wust learnt how to separate the essential oils of plants from the nectar secreted by them, and by adding these oils to honey from other sources gave it the aroma of the plant from which the essential oil was obtained.

Thin honey spread on roses, violets, jasmin, etc., absorbed the aroma of these flowers, and was distinctly noticeable in the honey when extracted from the combs of a test colony which had been gathering it.

After the publication of the results of these experiments, the information was made use of in a business way not antici-

pated by the other, and the aroma of different flowers imparted to substances not the product of the bee hive.

What we require in Australia is some process for extracting the aroma, or a large percentage of it, from our strong honies. Some honies certainly improve wonderfully when kept for one or more years, but this process will certainly not commend itself to beekeepers, particularly Victorians, at the present time.

Rural Industries Exhibition. Melbourne, Vic.

PRIZE LIST.

Best 24 lb. sections, honey; 1st prize, Mr. J. R. Dowling, 2nd prize, Mr. Ridgway.

Honey Vinegar; 1st, Miss C. L. Billingham.

Extracted honey (24 lbs.); 1st, Miss C. L. Billingham, 2nd, Mr. J. C. Dowling. Display for Market; 2nd, Mr. Yates.

Best Collection of honey from various trees; 1st, H. H. Davey.

Wax; 1st, J. Yates, 2nd, Miss Billingham.

Champion Queen Competition, £5 and Certificate; 1st, A. A. Roberts, Muswellbrook, N. S. W.; 2nd, W. Abram, Beecroft, N. S. W., (10 entries).

Honey Cakes; 1st, Miss Arland.

D. F., Wonwondah East, Vic., May 27th:—We are having an awful dry season over this part, no feed for our stock for want of rain.

F. L., McLaren Vale, S. A. May 20th:—The season here has been a very good one and I think by what I hear it was the same all over South Australia. We shall be glad to get a poor season next year as there are a great many tons of honey to be got rid of in the colony. The price here is 1³/₄d per lb.

Combs containing pollen under honey are readily distinguished from those without by holding them up before a strong light and looking through them, especially if the combs are somewhat new.—*Exchange*.

W. R. Berridale:—Just passed a fairly fruitful season, with a good sale for our honey. Cold district.

J. D. A., Mackay, Q., May 24th:—Here, like everywhere else, honey is a complete drug and is unsaleable.

C. E. R., Baerami, Goulburn River, June 12:—My bees are wintering first class so far, and every indication of continuing so for a month or six weeks, as the blue-leaved ironbark are in blossom, and the box are just starting. The past season was only fair in this district for honey, my bees only averaged 80lbs. per hive, but I am living in hopes of better times.

V. S., Goulbourn, 5th May, writes:—I was glad to read in the "A.B.B." that you had a successful meeting and that the Bee-Farmers' Association is now an established fact. Enclosed please find 2/6 in stamps as my subscription, as although I don't expect to be able to do much for the Association still I will do my best. Re those horizontal sticks, will one stick in frame keep the comb from breaking in non-reversible extractor as well as four wires? Would it be possible to publish a list of those members of the association of those who are queen breeders, foundation manufacturers' etc, so that members could help each other as far as possible instead of dealing from outsiders? There is another suggestion I would like to make if you will be patient with me. Often in reading the correspondence in the A.B.B. one often comes across letters mentioning that "such and such a tree is now blooming here" or "the honey flow here is now over" etc., and then one is dissatisfied to find that the date of the letter is not given and so no idea can be formed of the time these things happen. Wishing you and the Association all prosperity. Re Foul Brood I had it in my hives about six years ago when I had not had above 12 months experience, and lost all my three hives, but I soon started again. I was then living 40 miles from here.

[The one stick will do. Note your suggestion about dates.]



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