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West Maitland, N.S.W.: E. Tipper, August 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 5.

AUGUST 27, 1901.

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AUGUST 27, 1901.

The Australian Bee Bulletin



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The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

Edited and Published by E. TIPPER, Willow Tree, N.S.W.

MAITLAND, N.S.W.—AUGUST 27, 1901.

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WORK FOR THE MONTH.

Season before last not a pound of honey. Last season a heavy hail storm swept on either side of us for a couple of miles, destroying the best part of what promised to be a real good flow. Even then fewer hives might have given a good average to each. So we decided not to put all our eggs into one basket this year, and we are starting two outapiaries—one four miles away, the other two miles. Preparations for such removals has taken much of our time. Instead of 150 in one place, 50 in each

apiary will, we feel assured, give us far better returns and averages. Our first work was to fasten the bottom boards on to the bodies of the hives. We got from the local tinsmith, 300 pieces of tin 4 x 3 inches. In each of these we punched four holes. Procured $\frac{3}{4}$ in. clout-headed tacks, and tacked them through said punched holes on to the bottoms and bodies, one at each side and one at back. With the Simplicity hives we simply tacked them on to the bottoms. Next took all our supers off hives, shaking all bees and putting all brood into the lowest box, also taking all drone brood from said bottom box. Using self spacing frames, and this time of year, wax of combs being hard and stiff, there is not much fear of combs breaking, no bees or queens being crushed between frames. Non-spacing frames can be put right by slips of tin tacked across frames. A large waggon, used for carrying wool, with bags or straw at bottom, is the vehicle for carriage. On the night previous to shifting just before dark close the entrances. Were it warm weather, and much brood in hive, we should put wire cloth across top of frames, fastened with strips of wood along sides and end, and leave no cover on. Now, this time of year, if the frames are fastened tight, fasten covers on. For closing entrances strips of wire cloth may be used, tacked tight at sides, and with a strip of wood above to keep bees from getting out between the wire and body. It is astonishing what a small space an imprisoned bee will get through. If only a few hives have to be removed, strong rope may be tied tight round the bottom, top and all, and so save the tins and tacks. With the Simplicity hive it is only to draw the hive back to close the entrance;

then tack the tin already tacked on bottom board on to the hive. For fastening the cover we use for the flat top dove-tailed hive $1\frac{1}{2}$ in. wire nails. For other covers strips of tin with $\frac{7}{8}$ tacks will fasten top to body. For purposes of removal we prefer the Dove-tail hive to the Simplicity. The thinned out edges of the Simplicity bodies are apt to warp and leave places where bees can escape. In placing prepared hives on waggons place frames parallel with axle, and be very careful there is no outlet sufficiently large for bees to escape. Our plan is after the hives are supposed to be ready to go away place them on ground away from their stand. You will soon see if any are escaping. Should a few get out while travelling our experience has been they will quietly follow the vehicle. Mosquito netting over the whole will keep any escaping bees. It would be well to put an empty hive with combs on the ground of the removed hives to catch any bees that may return from the new location. These can be closed up, and removed in a day or so's time, or a queen might be given them. With us both removals were entirely successful.

Any hives that are now backward the generally received idea is, to leave them alone should they be queenless. You may either unite them with those that have queens, or procure queens from breeders that can supply them early. Before brood-rearing commences it is sometimes difficult to ascertain if a hive contains a queen. As, however, the weather becomes warm, queens soon start laying if present. Be sure there is plenty of food in the hives and water is accessible. Honey or sugar and water put on the frame and given in the hive at evening time is our favourite way of feeding. Take out all drone combs in the brood nest and replace with good worker combs.

Tools used in the apiary, if painted red, are easily found if lost.

Honey diluted in water given to small-pox patients postulates of the worst variety will disappear.

In removing hives, if per rail, place frames parallel with rails; if per road place parallel with axles.

See that your weak colonies have sufficient food, tuck them up snug and warm, and then let them alone.

Doolittle says the humble bee was introduced into Australia at a cost of thousands of dollars. Can any of our readers verify this?

Beautiful showers gives good hope of plenty of honey. We must not, however, count our chickens before they are hatched. Plenty of time yet for mischief-making frosts.

J. H. Martin and I are out again. He says, "A person devoting his entire attention to queen-rearing will strive to improve his stock." But how can he select his best stock, without having them store a crop to show which is the best stock?—DR. MILLER in *Gleanings*.

W. Brown, Hon. Sec. of the Bristol and District B.K.A., said in a recent issue of the *British Bee Journal* (May 16) that "bee-keepers' associations will be doing more good by finding a market for the produce of members than by sending out experts to teach good beekeeping."

The interests of dealers and producers are largely identical, they are not so altogether, and while dealers are in office we cannot expect them to do that which takes out of their pockets some of those profits which we the producers may consider unnecessary for their health.—*Progressive Beekeeper*.

E. R. Root says in *Gleanings* of June 15:—A good judge cannot tell by the looks of a queen whether it is a good or a poor one, although an experienced man can often tell an old queen from a young one. We can however, very often judge of a queen by a glance at the comb that she has been laying in.

When one practices clipping for a series of years he will be surprised how many colonies he will come across that

have changed queens unbeknown to him. Half of the queens reared in 1899 were found superseded this spring in a large apiary in New York. We have had a similar experience in our yards. Unless a queen has been clipped, one cannot be sure of her identity.—E. R. Root, in *Gleanings*.

Editor Will Ward Mitchell of the "Progressive Beekeeper," besides his work on that paper, issues a small weekly, writes for several publications, get out from 50,000 to 100,000 catalogues each year, with job work galore, reads the latest books, acts as secretary in two lodges, superintends a Sunday-School, teaches a class mostly of teachers, and, in fact, is not burdened with idle hours. He hopes soon to catch up with his work, now that his eyes are better.

Like Mr. Penberthy, Mr. Beuhne believes that kerosene tins are stronger than ordinary 60lb honey tins. He has a box fitted in a frame with handle for turning in which he places the empty kerosene tins. It really resembles a churn. A bung to the tin is made up with a wedge shaped top, and a sufficient number of discs of felt, blanket, or other suitable material fastened by a screw driven through a piece of wood or cork. The handles of the tins are re-soldered. Then the tins are half-filled with boiling water containing soap and soda in solution. Two good churnings make an effectual cleaning. In the bed of the creek adjoining our apiary there is much dry sand. We have used this instead of the soap and soda. The tins, however, need rinsing with water afterwards.

Why there is so much more honey raised in California than Australia, and why a much larger number of hives can be kept in one place there than in Australia—In Australia the highest mountain does not reach 8,000 feet; while in California they attain an altitude of from 16,000 to 18,000 feet. The white sage of the valleys precedes the black sage of the canyons, and the bees commence working in the valleys and then gradually fly

higher up as the blossoms climb the mountain sides. It gives a much longer honey season than in regions not so mountainous. There is another fact that greatly extends the period of bloom in California—many flowers, like the white sage, are in long racemes which bloom centrifugally, that is, the outside flowers bloom much earlier than the inside flowers, or the lower flowers blossom earlier than the upper. This, of course, greatly prolongs the period of bloom, and consequently, the honey season.

CORRESPONDENCE.

Department of Lands,
Forest Branch,
31st July, 1901.

SIR.—With reference to your letter of the 24th ultimo, on behalf of Mr. ——— in connection with the timber cutting on Crown lands near Koorawatha, I have the honor to forward for your perusal the attached copy of a report received in the matter.—I have the honor to be Sir, your obedient servant,

H. CURRY,
Under-Secretary,

E. Tipper, Esq.,
Boxgrove Apiary,
Willow Tree.

Bathurst,
29th July 1901.

SIR,—I have specially visited the locality of the reported destruction of timber by the saw mill proprietor and others and I find that the trustees of a gazetted racecourse and recreation reserve are clearing the timber to make a course and ground for a cricket pitch. The proprietor of the saw mills is buying timber procured from private lands and partly from Crown lands, the timber getters being provided with licenses. The beekeeper at Koorawatha has no exclusive right to the green timber, and so far as I can learn there has been no destruction of timber contrary to law.

(signed) R. DEIGHTON,
Forester.

The U.S. for Lands,
Sydney.

THE ENGLISH MARKET.

Sydney,
2nd August, 1901.

Mr. E. Tipper,
Australian Bee Bulletin,
West Maitland.

DEAR SIR,—We beg to state that we have received cable advice from London, instructing us not to ship any more honey for the present time, as the home market is absolutely a dead letter just now.—Yours faithfully, for the Farmers' Co-operative Co., Ltd.,

D. McFADYEN,
Manager.

FOREST RESERVES.

Department of Lands
Sydney, August 6th, 1901.

SIR.—I have the honor to acknowledge receipt of your letter of the 3rd instant with respect to an enclosed letter from Mr. E. Tipper, Secretary of the Bee-farming Association, concerning the leasing of small areas of forest reserves for bee-farming, Bee Budget enclosed, and to inform you that the matter will receive early consideration.

I am to add that a further communication will be made to you when a decision in this case has been given—I have the honor to be, Sir, your obedient Servant,

H. CURRY,
Under-Secretary.

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

114 King-street,
7th August, 1901.

E. Tipper Esq.,
Willow Tree.

Dear Mr. Tipper,—I am urging this matter forward, and will advise you re same at a later date,

Yours ever,
R. A. PRICE.

A. E. S. Parkes, August 8.—Bees in fair condition, but prospects for coming season are not bright.

A. C., Rocky Glen, 3 August.—With bad seasons and bee paralysis I am about disgusted with the beekeeping occupation.

C. C. L., Inverell, August 1.—Very severe winter up here but bees doing remarkably well with me. I think we will have an early spring and good season for honey.

W. W. Woodside:—I find that there is very little in bee-farming, although I have one of the best stands on the Manning, and my honey has brought the highest price, still I find it don't pay.

W. A. G., Stroud, July 20.—The past season was not a good one up here. I have extracted five tins of honey from eight hives, and increased to eighteen, which are all in good order. I hope next season will be better than the last one. Wishing you and paper every success.

W. J. B., Clarence River, 1 August.—I received the sample copy which I wrote to you for, and have read it carefully. And find that it contains a great deal of interest to a bee farmer. I have read a letter in it from one of your subscribers, wherein he wonders if there is any Foul Brood in the Clarence River district. I am very glad to state that I have not heard of any as we don't want anything like that here.

W. L. D., Redglen, Melbourne, Vic., 5 August.—Bees have started breeding, the bulk of my hives have four frames of honey and five frames of bees so by the time Cape weed flow is on, 1st October to end, they ought to yield a half tin. Its rubbish, but there are some people who can't tell the difference between good honey and bad, so I won't mind a change in things. This time last year they had no honey and syrup until Oct. was rough; no brood until Oct. was rougher, and paralysis was the final, with 40 tins of honey out of Red Gum flow instead of 180 tins. I hope my luck is about to change, its about time.

J. R. C. H., North Berry Jerry, July 30.—I have ten hives but had bad luck with them last season as I only got two tins of honey from them. We had a splendid early spring last year and that started them swarming. They simply went mad. They would swarm in spite of everything I could do. Then the drought set in again and they have not had a good chance to recover since. However, they have gone into winter quarters in fairly good condition and I hope I shall

do better next time. The little black ant is the great drawback to beekeeping in this district. I have to keep mine on a stand with kerosene tins under the legs and even then a few get across sometimes during the summer months.

J. T., South Zillimur, Vic., July 19.—Bee News.—Season fairly good, only that we had the misfortune to have our honey room catch fire destroying over two tons of honey, about 2 cwt. of beeswax, and the implements for working a large apiary. That spoilt the look of things, and I would like through the columns of our Bee Bulletin to thank the manager of the Bee Supply Co., Melbourne, for the very practical way in which he showed his sympathy.

[We are very sorry to hear of this sad loss, and hope good coming season will more than make amends for it.]

J. R. H., Narrowmine, August 12.—I had 20 swarms last August (1900), and a few months afterwards they got a disease among them, and they all died excepting 6 swarms. You could find them all about on the ground too weak to get flying again, and died in the boxes in thousands. I want to see if any of your subscribers have found a remedy. Strange to say I got one new swarm before the disease got hold of them properly. They were not affected at all, and got sufficient honey to keep themselves and to feed the other five swarms, and have been strong all along.

[Would they have had stores sufficient to keep them, or were they properly protected from the weather.]

W. B. M., Bendigo, Vic., July 15th.—A.B.B. arrives regularly, to which I always look forward with pleasure. I have now my first experience with what I think is paralysis. Bees crawling in front of hives with tremblings and unable to fly. From an Italian queen purchased last year I raised four queens, all bees of which with the mother are affected. Does the complaint affect the old or the young bees. I was wondering how it would do to feed in early spring and stimulate to laying so as to

build up, and then purchase queens as soon as procurable. What is your opinion, or would it be better to unite the whole lot in spring and give new queens. We are having very little rain, two inches last month, and about 60 points for the present month. Wishing you every success.

[I would advise you to requeen as soon as the season permits of your getting them.]

W. S. H., Glengarry, Vic., June :—My bees are all snugly tucked up for the winter now, and are all in a fine healthy condition, or were the last time I looked at them. I have left the supers on all mine with a piece of bagging on top to absorb the damp and keep the bees warm. To my idea they come out just as strong in the spring, providing the colonies are strong when tucked up, and with less risk to the combs from the attacks of the bee moth, etc. We have had a very mild winter over here so far, having had only 2 or 3 frosts and a fair share of rain without any floods, far different to what it was last year, as we were up to our knees in mud and water by this time, it being exceptionally wet. I had a very fair season last year, I took fifty 60lb. tins from 25 colonies and left plenty in the hives to carry them through the winter, and have a fair promise for coming season. Wishing yourself, bees, and A.B.B. success in every way.

W. G. jun., Campbelltown, July 22.—The past season has been the best for bees we have had for a long time, gathering honey and pollen all through until this cold winter set in, and there is a prospect of another good honey fall. But I am afraid the continued dry weather and bush fires will soon begin to tell on the coming spring and destroy the buds on the trees. Our honey business is on the increase in this colony. In a few years time there will be a great trade done through the honey bee, and all the timber that is heavily ring-barked yields less honey. The yellow box and broad leaf ironbark yield large amounts of both honey and pollen, and the bees will be

deprived of all this timber to gather honey from. Thus the colony of New South Wales, which is the finest in Australia, will be at the loss of hundreds of tons of honey every year, which would be a large sum of money. There is not a better country in the world than this for the production of honey. This is my fourth year keeping bees in bar frames. I secured my first bees out of trees and increased each year, and up-to-date I have 170 hives all in a healthy condition, and this season I have taken seven tons of honey from 110 hives. Still I have not all pure bees, I have all sorts of black bees and hybrids and Italians, in a well-timbered locality, and hope you have good luck with yours.

A. B., Molong, July 15.—I am sorry to say there is really no news concerning bees to be had in this district. Last season bees simply lived and that is all. It was about the worst season I have experienced in this district. Next season is not too promising either, for the winter being so late a lot of trees became white with bloom and naturally most of this has been lost. The bees did well for a time, but I believe it did more harm than good, for it started the queens laying in great style. The result is, very cold nights chilled a lot of the brood and the workers worked themselves to death in trying to collect the flow of honey. They have very fair winter stores in, but I expect to see plenty of spring dwindling. It is a very strange thing that during the last four years there has been practically no swarming, although in most cases that I know of, there has been no effort made to check it. I hardly think that we have all non-swarming bees. I fancy it is that the bees see into the future. At one time it was quite common to see swarms flying around in all directions, but now there is not one. Of course the harvest of honey is becoming less and less each year through the march of agriculture, and the views of squatters who apparently think it is a great crime to see a green tree on their immense runs. However,

the unexpected often happens, so we live in hopes of a good season. Wishing you every success.

QUESTIONS.

G. BUTLER.

6. My honey house is 25ft by 13ft., and is constructed of hardwood and camphor boards, with gable roof. It is raised sufficiently high on stumps to allow a dray to be backed up to two folding doors. The main portion of the building extends a distance of about 13ft., the bottom plates of which are 4in x 4in. It then takes a turn upwards to the extent of a foot, and is carried forward 12 feet, the bottom plates being of a more substantial character—6in x 6in.—on which rest the weight of four tanks. The tanks which extend the whole width of the building are divided into four by boards 1½in. thick, and are tin-lined, being 2½ft high by 12ft. long. They are on a slight incline to give a pitch towards the four honey gates. The tops of the tanks are covered with tin, over which flooring boards are placed and nailed down. I think it would be a great improvement if they had four separate hinged lids, made dust-proof, as it would be impossible to get the honey out if it granulated. The tanks, of course, form a staging some four feet from the main floor, to which broad steps give access. On the elevated floor the extracting is done. The extractor stands on a box filled with stones. In the floor four one-inch holes are bored, through which the honey flows into the tanks. Four pieces of wood are securely screwed down, which form a sort of button to close the holes when not in use. When extracting a large strainer with a tube fitting in the one-inch hole is a great convenience. Leading from the extracting stage are two half doors, the top opening being covered with a wire gauze. On the outside is a landing, which is approached by a broad gangway. The tanks hold ten ton of honey. In order to make the building bee-proof strips of board are sawn out to fit the corrugated iron.

I made a very useful extracting house out of a 1000 gallon tank. I took off the top and bottom and cut it down the side. I then put in the ground two stout hardwood posts, to which I fixed a pair of old French doors, the tank of course, being extended to fit on the upright posts. On the top I fixed three pieces of wood to form a tripod, which on being covered with canvas made a very good extracting house.

QUESTIONS NEXT MONTH.

11.—Reductions of fees for ringbarking. See page 118.

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

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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.

Elsmore, August 17, 1901.

To the Editor of the A.B.B.,

I was very pleased to see that you had such a good meeting of members of the N.S.W., Bee Farmers' Association last month, with so satisfactory results.

I don't quite agree with Mr. Bradley, on local associations, they draw the attention away from the central body and starve it and then die out itself.

I cannot see anything against the union of the two associations the N.S.W. Bee Farmers and Victorian Beekeepers'.

Foul Brood is spread as much by the way hives are set as by any other way, young bees going in the wrong hives carrying the disease with them.

We cannot do anything with regard to prices of honey, as there is such a difference in quality, and the way it is put on the market. We may help one another in producing it.

Yours truly,

F. W. PENBERTHY.

"Honey Jumble" writes:—I received your note asking me for suggestions for Bee Farmers' Association meeting. Well, if we, as a body, could rise the price of honey I would like it very well, but I think in our district at any rate, there are too many small beekeepers. We raised the price to 3d in Inverell, and those in the Association were to charge no less, but the beekeepers who had from 10 to about 20 hives could afford to sell theirs for less, and in a little time the others, some of them, who had bound themselves to sell for no less than 3d per lb, were charging 3d with from 5 to 10 per cent discount for cash, and then drifted back to the old order of things, viz. taking sometimes as low as 8s for 60lbs. I would be favourable to a union with the Victorian Association, but could not be bound by their rules relating to prices if they have any. I would be most decidedly against a Foul Brood Act. I don't believe there is any foul brood anywhere near Inverell, and he would be a queer beekeeper who

would allow his bees to be ruined for the sake of a little attention, and if a beekeeper was troubled by ignorant men surely they are not so ignorant that they won't allow a practical beekeeper to give them a little advice or even help. I would not call it ignorance but malice if they did.

Other correspondence on these matters unavoidably held over.

A MOST IMPORTANT LETTER.

F. BOLTON.

The principle flow I depend upon is the titree, which flowers here in autumn and continues through the winter, but this winter we have had such heavy rains that I am afraid my crop is a failure although it promised well about three months ago. I have not extracted any honey for several months. I was in Sydney at the new year and took a few tins down with me. I was told it was rather dark and strong in the taste of eucalyptus, and that a mild honey sold better. Now, sir, please notice the objection, too strong of eucalyptus. Those tins of honey were the balance of a consignment which I had forwarded to London to my brother (who intends to act as my agent), and he had praised up my honey, and been inquiring how best to dispose of it, and in what packages it would sell best. A manufacturing chemist agreed to take a 60lb tin, and when he opened it he admitted it was a little dark, but none the worse for that; it was good honey and with plenty of body in it, whereas the honey that had been supplied to him before was represented as Australian honey and much thinner, and as to flavour, my honey was not quite strong enough of eucalyptus, but it was a good fault as he had a consignment of the extract of eucalyptus, and he would add more to suit his customers. Now you see the difference of opinions—in Sydney too strong, and in London not strong enough, and will add the extract to make it stronger. My own friends kept a tin for themselves, and the balance of six cases

a commercial traveller, who was making honey a specialty, scooped up at 40s per cwt. He had not any fault to find with it and sent word along to send another shipment as soon as I can, but I have not been able to yet. I have every reason to believe it fetched that much as I have received the cash. I now intend to try a shipment in 1 and 2lb square jars (glass) nicely labelled with the attractive labels you printed for me (they were pasted all over the other consignment.) According to my brother's letter there seems to be a ring of brokers who rule the London market, and it matters not whether our honey fetches a fair price or not they will have their first dig at the proceeds, and then you can have what's left. But what we want, sir, is our honey placed directly before the consumer, and thus do away with the middleman, if possible. I am waiting a reply from home as to whether my brother is in a position to receive a regular supply of first-class honey only and dispose of it, and in general to study our interests, and if his present premises are suitable. I know I should not be able to keep the supply up myself, and should any of my brother beekeepers feel disposed to trust any of their honey through to his care, they can rely upon getting honestly dealt with, and all he will require is a fair wage out of it for his trouble. No honey will be sent to him only from members of our own association, which I hope sir, will be a success without the aid of any one hankering after a fat billet as foul brood inspector, to live on the fat of the land, while the poor starving beekeeper is compelled to keep his nose to the grindstone to keep him there.

Read also Mr. Micklejohn's letter on page 116.

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

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

CAPPINGS.

From American and other Bee Journals.

In Austria, a Mr. Hexher has a hive made from the hollow trunk of a tree in which bees have been since 1767—134 years, and not a colony has ever died in it.

I have gathered up very large numbers of apparently dead bees in my hat, put it on my head, and in twenty minutes 90 percent. of the bees have been revived and able to return to their hives.—*Exchange.*

The lumber men of Michigan (U.S.A.), are a united body. At a recent meeting they passed a resolution that none should be allowed to lumber this winter, more than half as much as they did last winter.

When bees have to be shifted very short distances, it pays for the labour of taking them one or two miles, placing them there for a couple of weeks or more, and then bringing them back to the stand selected for them.—*Exchange.*

When uncapping for the extractor, *slice deep*. Takes ever so much less time than the usual way, the honey can be drained from the cappings, and it takes no more wax to build out the cells than the bees will secrete anyway.—*Coggschall.*

Mr. Charles Dadant says:—I have introduced into my apiary more than 2,000 Italian queens since I began importing, and I have never yet found a single queen producing regularly drones that one could consider as Italians, judging by colour.

A teaspoonful of gunpowder ignited at the entrance of a hive is very effective in stopping robbing. Only two or three combs blackened a little at the extreme lower end, and very few bees killed, just the few in the vicinity of the powder—says a writer in the *American Bee Journal*.

Granulated honey in combs may be removed without destroying the combs by exposing the combs in the open air at a time when honey is not so plentiful in the fields as to wholly employ the bees.

Sprinkle the combs occasionally with warm water, and the bees will gradually liquefy and remove the honey.—*Exchange.*

Thick top bars were introduced to save burr and brace combs. S. T. Pettitt in *Gleanings* says he makes his $\frac{3}{4}$ inches thick, but if it were possible to have them of sufficient rigidity, he would have them only $\frac{1}{8}$ inches thick, and maintains they will have less burr and brace combs than thick ones, besides giving from 1600 to 2000 more cells in a hive.

In forming sections where you have no hand-press there is a liability to break a few in fitting them together. These need not be discarded. Have at hand a pot of prepared glue and a lot of stiff brown paper, such as hardware men use. Cut strips the width of the sections; apply glue and allow a couple of inches lap for each edge, and your section when the glue sets will be as sound as any other.—*American Beekeeper.*

When extracting honey, Mr. F. Minnick places a keg upon the scales, and allows the honey from the extractor to run into the keg. As the keg fills up, the scales and kegs sink. When the keg becomes full it has settled to such an extent that a stick connecting the keg with the honey-gate, closes the latter automatically. This prevents one from carelessly allowing the keg to fill to overflowing.—*Exchange.*

If large hives are used to prevent swarming, we have to consider that a large hive should contain a large number of empty cells in which the queen can lay her eggs. I know that a colony in a large hive only half filled with combs may swarm, especially if the queen is old. It is not the large hive itself that prevents swarming; but the large number of empty cells available for the queen will prevent swarming, and even this is true to a reasonable extent only.—L. STACHELHONER in *Gleanings*.

ENLARGING BROOD-NESTS.—This must be done cautiously. If the colony is strong, a comb on the outside of the brood-nest may have a few cells of honey uncapped near the centre of the comb, or

a honey-clogged comb may have a large patch of capping in the lower central part bruised and put next to the comb containing brood. The influence of honey from the bruised cells will stimulate and warm up the colony and induce breeding in the comb as soon as the bees have cleared out the cells.—*Exchange*.

Poisoning bees is upheld by law in Bavaria. The bees of a beekeeper in G.ossengull were being robbed by those of another beekeeper near by. The first-named shut his bees in and placed poisoned honey near his hives. The result was that colonies of the neighbour were very seriously injured. Complaint was made and the offender sentenced to twenty days' gaol and to pay a fine of \$75. Exception was taken and when the matter came before the higher court the former decision was annulled.

I think specialty in beekeeping does pay better than to keep bees as a side issue. I also think that beekeeping as a specialty no more than holds its own with other occupations. Obviously, then, I also think that the keeping of bees as a side issue does not pay, when compared with the results that might be obtained from putting the same capital, energy, and time into one's main business, whatever that may be. Therefore I can with a clear conscience say to the prospective bee-owner "Don't. Either make it a business, or keep out of it.—F. L. Thompson in *Progressive Beekeeper*.

"Don't think you can raise queens in the winter. Don't try to start queen-cells much in advance of the time when bees begin to start them from swarming. Don't think that a thimble full of bees can start good queen cells. Don't be satisfied to rear queen-cells from anything but the best stock obtainable. Don't be satisfied to let the drones take care of themselves without suppressing them in all but the very best colonies. Don't allow your nuclei to stand without brood so as to start laying workers. Don't take a queen from a nucleus until she has laid enough eggs to establish a fair reputation

as a layer. Don't give a cell to a nucleus unless it is near hatching, especially if weather is cool. Don't hesitate to smash remorselessly any queen that don't come up to your standard. Don't set your standard too low. Don't fail to recognize that the queen is the main thing in beekeeping. Don't think that in thirty days you can learn as much about queen-rearing as Doolittle did in thirty years. Don't think that if you don't do any of the above-mentioned things, you don't need to be on the lookout for some other foolish thing."—*American Beekeeper*.

Selected tested, same plus size and colour. What does it amount to? I do not consider it possible to form any really valuable estimate of a queen's worth by observing her in a nucleus such as most queens are tested in. The only thorough and satisfactory test is to try her for three months in a full colony; and no queen dealer can afford to do that and sell the queen's at current prices. Can we not get some more definite system of grading and get the business nearer to the same basis as that on which thoroughbred stock of the higher animals is reared and sold.—A. C. Miller, in *American Beekeeper*.

I drove down town, putting in the waggon two empty supers, setting them on one side. The front one ran across the waggon and the other lengthwise. The one running lengthwise fell down. Then I put the front one lengthwise and the other crosswise. As often as they fell I set them up again, constantly changing. Out of 13 times the lengthwise super fell first every time but one. That was going down a hill, but going down the steepest hill the lengthwise super fell and the other stood its ground.—Writer in *Gleanings*.

The chemists in Germany have not yet been able to discover a reliable method to detect adulteration in honey. Mr. Kaempf, of the Pure-food Commission, says in the April issue of the *Leipziger Bienenzeitung*, that he collected samples of honey, taken from the stores in Koenigs-

berg, and submitted them to the Agricultural Experiment Station for analysis. The chemist of the station was to work on these samples for four weeks; and although it was evident that many were adulterated, only one of them could with any degree of certainty be pronounced as such, others receiving the attribute "suspicious." The difficulty is the different honeys differ in their composition, and the chemist does not know where he is at.

A pointer for those who, like myself, are forgetful: Here is a queen I wish to remove. The hive is all open; I hold in my hands the frame she is on, but I have no cage! It is a long way back to the honey-house; the sun is hot, and robbers have found us. If I place the frame back into the hive in order to go and get the cage, I shall miss the queen; I can do nothing so long as this frame is in my hands. I want that queen! What shall I do? Simply place her, head in, carefully between the dry lips, close the hive and then go and cage her. See? I hold cells, root in, the same way, very often.—"Swathmore," in the *American Beekeeper*.

A few years ago we published a report from a bee-keeper who told how one of his colonies became so enraged that the individual bees of it stung everything in sight; that after this colony got quieted down from its rampage it appeared on examination as if there was scarcely a bee left that had not lost its sting. Yet this colony, he says, lived and prospered, and that for weeks and weeks afterward those "stingless" bees were seen to be going to and fro from the hive as though nothing had happened. This remarkable report was later confirmed by another subscriber who had had a similar experience. But this is true: That a bee that has lost its sting, and that is subsequently caged in a mailing-cage with about a dozen perfect bees, may die in a few hours, and we have had them live two weeks, or as long as the other bees with their stings.—*Gleanings*.

Some honey for sale in a shop window, labelled at the bottom of the bottles in

very small type, "This honey has a very little glucose added, to prevent it from congealing." Glucose has such a bad reputation just now that no one will knowingly buy it for food, and so that honest honey and glucose merchant is likely to have his stock on hand for a year or two, until the reputation now acquired by the adulterant fades a little. I purchased a case of Jamaica honey a little while ago as a sample. It is roughly got up, and has the same fault as the Australian in this respect that it is packed in kerosene tins, without label or mark of any kind to indicate whence it comes. The honey itself is lighter than yellow or grey-box in colour, and has a finer texture than Australian. It is, however, very coarse in flavour, and whereas Australian honey grows on the palate, this honey one gets to like less the more is eaten. I do not think the Cuban and Jamaica honeys will be able to compete against Australian in the long run. New Zealand clover honey will beat Australian in price always, but there is so little on the market that it will not count as a competitor.—DRONE, in *Australasian*.

"What causes the swarming-fever?" Without going into details, I will say that a surplus of young bees, compared with unsealed brood, will, at the proper season, incite the swarming impulse. In small hives this is caused as soon as the number of empty cells is not sufficient for the prolificness of the queen. In large hives the swarming-impulse is not incited before the queen reaches the limit of her prolificness. I have, in large hives, many times observed that the queen had laid, during the previous 21 days, 3400 eggs daily, on an average, nevertheless no queen-cells were started. In a ten-frame L. hive the colony had queen-cells, while the same calculation showed only 2500 eggs daily. The advantages of large hives in spring can be seen at once. It would be easy to start the swarming-fever in a strong colony if we could take away all unsealed brood. The same condition can be created if we

contract the brood-nest. The swarming impulse will be incited, sometimes, later, as soon as the queen cannot lay the same number of eggs any more for lack of empty cells. By brushing all the bees from the combs we have about the same proportion of young and field bees as in a natural swarm, have the same condition which incites the swarming impulse, and, if we are careful that the bees during the operation fill themselves with honey as they do before swarming, I can not see a reason why they should not build combs as well as natural swarm. In fact, I never had any trouble in this respect with brushed swarms, made either on the old stand or on a new one.—L. STACHELHAUSEN, in *Gleaning*.

Possibly I can suggest some improvements on the tent for mating queens in confinement. Suppose we abandon the gasometer shape, and let the starting model of shape be that of a race-track roofed in—track only, centre circle not occupied. Then flying around and around insects can go as many miles as they wish in a course that will not require any halting and turning back. Suppose we abandon the netting and use cheap cotton cloth. Abundance of light will come through it; and it removes most of the temptation to butt in the effort to get out. Cheaper, much stronger, makes up on the sewing-machine more kindly, holes which may develop will be visible instead of invisible—better every way (except perhaps the deadly didn't think-of-it one), and excepting the obvious objection that it will take more wind, and need to be more strongly supported. But with cloth cover and race-track shape I don't believe it will need to be more than 16 feet high. Presumably it will be possible to fly young queens and drones in such a course *in ignorance of the fact that there is any more to the world*. Before you build, and after you have got this crude ideal of shape well in your mind, you can push in two opposite sides of it until it is dumb-bell shaped instead of circular—hives to be at one of the bulbs. This

modification will save one wall, save very greatly in the ground area required, and give greater strength against wind. The cloth at the sides can be arranged to pull up and tie at the top when not in use and thus offer little sail to a storm. E. E. Hasting, in *American Bee Journal*.

I have yet to find a simple way of introducing queens that is more uniformly successful than that of Mr. Samuel Simmins of England, called by him the fasting method. It is: Confine the queen alone and without food for thirty minutes, meantime keeping her warm, and then let her run in under the mat, preceded and followed by a puff of smoke. This is done at night. Always use a fresh receptacle for each queen, or use a metal cage and scald it after each use. On the theory that the bees detect the foreign odour of an alien queen, this should not be necessary; because the mixed odour would form a blend approaching the general odour of all colonies. I believe the true reason for the necessity of deodorizing the cage is that otherwise, the queen detecting the seeming presence or nearness of a rival, is angered or at least is put on the defensive so that when liberated she enters the colony in a spirit of hostility which is even greater than her hunger. The bees where the queen is to enter and who were put on the defensive by the opening of the hive, are frightened and driven back a little by the smoke. The queen who is too hungry to be much disturbed by this, walks quietly and directly in just as if she belonged there, puts out her tongue for food, is given it, and presto! she is at home. As a matter of fact the queen gets very little of the smoke, for only a puff is used and the rapid fanning of the bees drives it out quickly.—A. C. Miller, in *American Bee-keeper*.

When sulphuring for paralysis, for reasons I will give later on in this, I always go to the colony I am to treat, during the day, and take away all the combs that contain brood; or, at least, unsealed brood or eggs, and give to some other

colony; then in the evening, as soon as the bees have quit work and are all home I proceed to dust sulphur over every comb in the hive and, if possible, on every bee in the hive. I never measure the exact amount of sulphur used, but presume about a tablespoonful to every three or four combs in the hive. I do the work by taking what sulphur I can hold between my thumb and first two fingers and dusting same over first one side and then the other of each comb, bees and all; also over any collection of bees there may be off the combs in any part of the hive. My aim is to have a thin dusting of the sulphur over every bee and every comb in the hive. The thinner the dusting the better so it reaches everything in the hive. I tried using an insect powder gun, but couldn't do as good work as I could with my fingers. The next day after doing this dusting, I carry back to the hives the same number of combs and brood as I had taken away. The reason for taking away brood before dusting the combs, and returning again afterwards is because the dusting of combs not only kills all the unsealed brood in the combs but ruins these same combs for brood-raising. If such combs are left in the hive, all eggs deposited in them will hatch out all right, but the larvæ will die as soon as hatched. By giving these same combs to strong colonies, they will clean them out and use them all right, and no loss of combs will result.—O. O. Poppleton, in *American Beekeeper*.

Speaking of heating honey, it does not absorb heat as freely as water. Set a chamber or hive of combs of honey in a warm room, and it will be many hours in getting warmed through, at as high a temperature surrounding as 100 to 120 degrees. I often bring in a lot of extracting chambers and store them, and before extracting I keep the room at well nigh 100 degrees for about two days, then extract, I have so treated several tons, warming for extracting after the honey season was over—as late as November and December. The consist

ency of honey varies quite materially, much depending on conditions while being gathered. If the flow be very slow, capping is delayed and the cells remain open, and the honey is exposed to the evaporating process for so long that it becomes very thick: but while a rapid flow the cells fill rapidly, and the free honey and constantly full honey-sacs cause a free secretion of wax and prompt sealing, sometimes even before the honey is sufficiently ripened. When nectar comes freely it is dropt into any available open cell, among the brood, near the entrance, in fact anywhere where there is found an open cell, big or little. When the flow lets up, or stops, then this scattered honey is gathered from here and there and stored regularly. Even a rainy day serves as a chance to put things to rights in a much disordered house caused by the previous rush to get all that was to be had while it was available. This unevenness will be observed at times by thick and thin streaks in the same combs, and some parts of a combs will extract much more freely than another.—R. C. ARKINS, in *A Bee Journal*.

Up-to-date growers of vegetables under glass have long since discovered that the dislodging of the pollen and setting in motion could be accomplished without bees, and was equally as successful. They simply go through the house with a light stick or rod and give each plant a gentle shake and the work of pollenising is accomplished! The benefit from the bees was because they put the pollen in motion. The ways of the propagation of species in the vegetable, insect or animal kingdom, is "wonderful and past finding out," but it affords a theme for interesting investigation which should be conducted in an impartial manner for the purpose of arriving at the truth. It is possible and I might say highly probable, that there may be some occult affinity or attraction between the stigma and the pollen of flowers by means of flowers which the infinitesimal particles of pollen that are always floating in the air during fruit-

bloom, are drawn as by a magnet, to the stigma when a short distance only from it; and when we look at the results—so few failures even under adverse circumstances it seems there *must* be something of the kind. It is a fact that bees are seen in flowers with pollen on their feet and in their baskets, and they are seen to leave one flower and go to another with their pollen; but who *knows it to be a fact* that some of this pollen obtained from the first flower is left on the second one visited? Is there any way of finding out? And if it were left, do we know that this flower would *not* have produced fruit without the visit from this bee? I have known millions of flowers to produce fruit that never had a bee within six miles of them. If they will produce fruit in one place without bees why not in other places? This claim is all conjecture based upon preconceived theory without a knowledge of sufficient facts to establish it as a truth; and when confronted with such undisputed facts as I have given in regard to growing fruit in maximum quantities and qualities without bees, it shows its weakness.—F. E. Wheeler in *A. B. Journal*.

Dickel, the author of the opposition to the Dzierzon theory of parthenogenises, has been making further experiments, which lead to results comprising the Dzierzon theory. A writer in an Italian Bee journal says:—"How certain the method of examination practiced by the zoological department is," writes Professor A. Weismann, "may be inferred from the following: Mr. Dickel, who is not a microscopist, commenced during the time—certainly not short—occupied in the investigations, to doubt the full accuracy of the microscope in the solution of the questions concerning fecundation, something for which we did not reproach him, finding it, on the contrary, very natural. As he wished to put the matter to a test he changed the labels on the contents of two packages, the one with eggs taken from drone-cells and the other with eggs from worker-cells. This

occurred when the result previously obtained had already fully convinced us that the eggs found in drone cells are not fecundated. Hence we are not a little astonished upon finding in a new examination exactly the contrary; each egg which was supposed to have come from a drone-cell appeared fecundated, whilst none of those which, according to the label, must have been taken from worker-cells, contained a sign of fecundation. It was very natural to think at once that there must have occurred a chance error in labelling the contents of the two packages; and to ascertain this, an assistant, Mr. Petrunkevich went to Darmstadt (Grand Duchy of Hesse-Darmstadt), to the residence of Mr. Dickel, and ascertained that the exchange had actually been made, and purposely. After all this," Professor Weismann concludes, "it may be taken as proved that the eggs deposited in drone-cells *are normally not fecundated*, while on the other hand, those deposited in worker-cells *are always fecundated* and that, therefore, the theory of Dr. Dzierzan remains unchanged." But Mr. Dickel does not yet admit himself vanished. Fecundation, he says, does not always depend upon the sperm, and he announces that, against the deductions of Professor Weismann, he will oppose other deductions.

The following was translated from a "German Bee Journal" for the "British Bee Journal":—"The inflammation and other unpleasant symptoms which usually appear after a bee sting are often attributed to that sharp acid so widely distributed in the animal kingdom, and known under the name of formic acid. This fluid, however, has nothing to do with the swellings; its utility to the bees is of quite another character. Professor Joseph Langer, of Prague, a little while ago, examined the contents of the poison-glands of 25,000 bees. This he found to be a clear fluid, soluble in water, tastes bitter, and has a pleasant aromatic smell, which, however, soon passes away; this scent cannot, therefore, be the poison.

The formic acid which gives its peculiar acid reaction to the contents of the gland is also very evanescent. The contents of the gland itself retain their poisonous properties, however, even when dried and subjected to heat. The poison is, we therefore suppose, a vegetable base, an alkaloid, as the most active poisons in the vegetable kingdom are known to be. Professor Langer proved that the poison has no effect whatever on a healthy skin; if, however, injected under the skin, all the symptoms of bee-stings set in. Should it reach the larger veins or arteries it causes a general disorder of the system which reminds one of snake-poisoning. The weight of the poison injected into the wound made by a bee's sting is between a two ten-thousand and threeten-thousand part of a gram. The largest part of this is formic acid, which is such an important factor for the well-being of the bees. This works as a means of preserving the honey, owing to its acid reaction. The bee allows a little formic acid to fall into each cell filled with honey before it is closed or sealed, and this small quantity is enough to prevent fermentation. Honey extracted from unsealed combs never keeps long unless 0.1 per cent formic acid be added, which is all that is required.

Mr. H. L. Jeffrey says in *Gleanings*:—Twenty years or more ago some writer in the *American Bee Journal* used these words, in meaning: "When both sexes and conditions are ready, mating will take place anywhere." I will give one instance out of many to illustrate. In 1884 I had a three-year-old queen I was using as breeder. Her own record, several of her sisters' and her mother's records were above the best average. From a batch of 30 or more I selected 8 that were very good resemblances of the old one. They were in two-frame nuclei, and were watched very closely. On the evening of their seventh day they were closely examined, as they had been every day, and they showed that uneasiness that is apparent the day before they mate. Drones from the old queen that were of

even colouring, maturity, and size, a good many of them, were caught and put into the hives the nuclei were put in. Each comb in every nucleus was closely looked over by three or four of us. The combs were wedged firmly to one side of a 9-frame hive, leaving a half-inch space between them; $\frac{3}{4}$ inch from the combs was keyed a division-board just one inch shallower than the combs. A board cover was put on with wire cloth, covered with thin muslin that covered the open space of the hive. Thus the 8 nuclei were left to quiet down over night. Between 7 and 8 o'clock the next morning these nuclei were all carefully examined to see that everything was all right. Then the entrance closing blocks were screwed on, also the covers. The 8 hives were then loaded endwise into the body of a platform spring waggon. All were then pushed into the shade, the same thing resulted. Hive after hive, the whole eight had mated and clipped queens. Each hive and queen was very carefully and cautiously examined in the morning before starting, and the drones were as carefully selected. That was a successful confinement mating.

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WANTING HONEY,

IF you apply to E. Tipper, Willow Tree, will tell you where it can be purchased. Please send postage stamps for replies.

Beekeepers

HAVING Honey to sell, communicate with E. Tipper, Willow Tree, who will do his best to find market. Only fee, postage stamps for replies.

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

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/-
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Extra Select Tested, the very best, 25/- each.

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VICTORIAN NOTES.

R. BEUHNÉ

INTRODUCING QUEENS (continued from July issue.)—The first method of introducing I practised was that advocated in the instructions on the queen mailing cages, and I had about the average success. Sometimes the queens would be balled after being released, and sometimes the bees would not release the queen for many days, queen cells having been raised in the meantime and valuable time was lost. There appeared to me too much uncertainty about this method.

I next tried the nucleus plan. Starting a nucleus alongside the colony the queen of which was to be replaced, and after the young queen in the nucleus had commenced to lay I removed the old queen of the hive and united colony and nucleus. Observing the usual precautions of uniting I never had a mishap; but the drawback was that it required the operation of making a nucleus to be gone through for every colony so requened. To avoid this I established a number of permanent nuclei, and whenever I wanted a queen I went to a nucleus, took out a frame with queen, brood, and bees, and inserted it into the place of one received from a colony, and together with the queen it was given to the nucleus, where the queen could go on laying till the young queen emerged from a cell given it. I may here state that when a queen is more than two years old I do not remove her when giving a cell (in a protector) and in three cases out of four the Virgin queen will take no notice of the old queen and in due course commence to lay, when she may be removed and another cell given. Thus the nucleus is never queenless and gradually increases in population.

In some cases I have had two and three old queens in a nucleus all laying on the same combs. The jealousy so marked in a young queen is quite gone after the second season, and such a queen is not considered a rival even by a virgin queen. On this point doubts of the correctness of this reasoning have been expressed to

me, and to anticipate such doubts I may state that I have proved the point by ocular demonstration to many beekeepers who have visited my apiary, and who can bear out my contentions.

This last mentioned method of introduction was satisfactory in every way excepting if there were any suspicion of disease about the apiary the changing of brood combs from one hive to another is a risk at the best, and if there were even germs of disease only in one hive, there is no advantage in spreading them into another.

Bearing this in mind during a visitation of foul brood about 8 years ago, I adopted Simmins method of introduction, perhaps not quite according to instruction. I remove the old queen some time after noon, and let the new one run in from the top after dusk, after isolating and starving her for half-an-hour.

I have practised this method for about six years with only the loss of one queen in many hundreds. Now as to its disadvantages: Sometimes after removing a number of old queens there would be a storm raging, just as I wanted to run in the young queens, or something unforeseen would make a call upon my hive, so during the past season I have adopted yet another method, and by it, so far successfully, introduced over 100 queens. I remove the old queen and introduce the new one at one opening of the hive by means of a cage, a description and illustration of which I must reserve for the next issue.

VICTORIAN APIARISTS' ASSOCIATION.—In answer to Mr. J. K., Mt. Cole, re clause 5 of Rules of Association, all a beekeeper has to do when wishing to become a member is to send his subscription and the name of a beekeeper whom he knows (not necessary personally) for reference to the secretary. J. K. could have referred to me, as I know him to be a beekeeper. The reason of the wording of the clause referred to is to enable the executive in exceptional cases to refuse admission to people who might if admitted as members, discredit the Association.

PROPOSED CLOSE SEASON FOR WILD BEES.—I have received the following communication from the Secretary for Agriculture:

Melbourne, July 20, 1901.

SIR,—I have the honour to bring under your notice a suggestion that legislation enactment is desirable for the protection of bees, as the hives of wild bees are frequently robbed for the honey without regard to the future of the bees during winter months. It is considered that robbing bees between March and October should be prohibited. There is no law in Victoria dealing with bees, and it would possibly be very difficult to administer such law.

I would therefore feel obliged by your bringing the matter under the notice of the Association, and favouring you with its views on the subject.—Yours etc.,

W. G. MARTIN,

Secretary for Agriculture.

To which I have sent the following acknowledgement:—

To the Secretary of Agriculture,
Melbourne.

SIR,—In answer to your letter of the 20th inst., I shall bring the matter of prohibition of robbing wild bees nests during the winter months before the Association, and furnish you with the views entertained on the subject at the earliest possible date.—Respectfully yours,

R. BEUHNE,

Correspondent.

I have written to all members of the advisory committee and the Secretary to the Executive. I have also consulted some members personally. The replies to hand up to date of writing, indicate that beekeepers are opposed to the suggested close season, several express themselves strongly to the effect that if there is to be a close season it should be exactly the reverse of that suggested, and the robbing of bee trees confined to the winter months, when the danger of infection to apiaries is less on account of the absence of brood in the hives, and the ability of destroying

the refuse of bee trees by fire without the risk of originating bushfires.

The origin of the suggestion of a close season is from outside our Association. Will members who wish to express their opinions on the subject kindly write at once to me, so that the views may be collected and forwarded to the Department of Agriculture.

R. BEUHNE,
Correspondent.

MY NOTE BOOK.

W. L. DAVEY.

I would advise friend Davis that it is not wise for a person to be disgusted with the physician because of his knowledge, nor with the lance that probes to the seat of disease—a man may be well disgusted with the disease.

Our friend is disgusted with my remarks, why should he be? Is not the Silk Association in serious fault. Is it not by its laws and rules against the proper and only equitable adjustment of the industry and a menace to beekeeping. Has it not in the past acted with craftiness and deceit, with which I have challenged them publicly to clear themselves of, and they have kept silent, and well they may. I have proof from their own official organ in black and white, and which a summary of appeared in the May 1900 issue of A.B.B. From then onwards friend Davis will find material evidence to deal with, if he will but look up his back A.B.B's.

The Silk Association never had the courage to face such hard facts, perhaps their champion will show us how he can clear their character. Any public Association that allows such defamation of character, to remain a standing disgrace against them, is guilty of either the charges laid against them, or they are careless and indifferent as to their standing amongst the beekeepers.

Come now friend Davis, were you at the show. If you were, how can you be so foolish as to challenge my statements. If you were not, then you've put your foot into it. I took the trouble to count the people, which was a very slight task indeed. Whilst I was there from 7 o'clock to 10 in the evening, I actually counted 70 people. To be on the safe side I gave the public the benefit of thumbs in, and that makes 72. But I did not say the majority of the public were there or that they were wooden-headed. Our friend innocently gives himself the lie, for he says in one passage that I said the attendance of the general public could be counted on the fingers of each hand. This is right. But how comes he to say that I reckon the majority of the public are woodenheads, etc.?

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.

Is the number 70 a majority of Melbourne's thousands? Not according to the first rudiments of reckoning that I have learned, whatever our friend may say to the contrary. After deducting say 30 Silk members, 20 showmen and about 10 free lances, the interested majority of the purely public was 10 for the evening.

Its a bit awkward, is it not friend D, that I happened to know nearly all the Silk people, and it comes out as a peculiar coincidence that the rudiments of reckoning happens to be my present employment, which is another awkward thing for that show.

As for jealousy of a rival, there does not seem much possibility of my being jealous. When Lord Hopetoun is jealous of his stable boy; then I may be jealous of the Association that has by its past "achievements" caused such men as Messrs. Bennett, Bolton, Garrett, Beuhne, Murray, Penglase, Bassett, Willyan, McFarlane, Russell, Wilson, and others too numerous to mention, to band themselves together for the benefit of the beekeeping industry.

Its actions bears out its principles. Its actions seem to have forced friend Ballinger into the background, and its actions have caused Messrs. Hallam, Yates and Freeman, to desert the Silk people for the more representative body of beekeepers.

Yes friend D, its actions bears out its principles. I agree with you, and it has borne its principals in beekeeping into the Victorian Apiarists' Association. And at the rate it is going there won't be much left to bear out, excepting a skeleton, and it will take the road to the museum, where they have a few glass cases available for any stray curious, especially any bee, scent, worm, yes no insects.

CANDIED HONEY.

J. J. PARRY.

In reply to Bro. Evald's criticisms on my notes. He seems to think that it is unwise for us to pass remarks which he considers bold. That is where one differs in opinion.

It is said by many that the cane sugar of the nectar of flowers is thus changed into reducing sugar or dextrose and levulose by the bees. This dextrose and levulose is also said to be uncrystalizable, but this point I am very doubtful about. If this mixture is honey pure and simple, what about hundreds of tons of honey that is crystalizable. He will perhaps say its through having too much moisture in.

Well, it appears that he can always state definitely whether certain classes of honey will candy or will not candy. Suppose two honies, gathered under the same conditions, one candies the other does not, are these two honies the same composition, I myself contend they are not.

What I wrote last month re candied honey, was in reply to a statement that I saw in the May number of the *Australian Beekeeper*, "that it was not the natural state of honey to granulate." He knows as well as I do that beekeepers are always anxious about their crop, especially when they have to send it away in 60lb. tins, that it will candy, not because its any the worse, but because its more convenient for them that buy it to retail it out. Friend Evald must have had a bad sale for his honey, when he keeps two 60lbs. three years.

I say now, as I have said before, that honey is faked, or doctored. There is perhaps no stronger evidence to me than hearing the beekeepers themselves admit it. I do not intend to convey that beekeepers themselves are not honest enough with regards the purity, that they mix other stuff with it. But the term doctored I wish to be understood with respect to beekeepers is that they raise the temperature to a point that causes the honey to retain its liquid form for a considerable time. This admission on the part of some that this process is carried on, proves to me that some beekeepers are much better at the business than others, because some say they can send it away with assurance that their returns will not be effected by its candying, others are doubtful. The surmise which might be made from reading Bro. Evald's remarks, is that I probably know the truth and being in the craft ought, if possible, conceal the fact, and as for prosecuting any dealer for selling adulterated stuff its a job, I'll promise you, on account of there not being any simple test by which spurious honey can be distinguished from the real. And another thing there is no definite formula as to what is honey.

Friend Evald, I quite understand you cannot grasp the laws at first (because its hard to do so) which holds elements together, forming various combinations with different properties. Honey is very delicately constituted, and who knows that by these various operations and disturbing causes produce compounds altogether different perhaps than otherwise would have been. For instance if I may put in this fashion, that an atom of sugar and an atom of water constitutes an atom of gum, just the same as a similar portion of starch becomes sugar by an equivalent addition of water. More than one compound also may be produced, by the grouping together in various ways the same elements. Who is to say that some of these changes do not take place either knowingly or unknowingly to the bee-keeper.

As honey is only the nectar of flowers, and the nectar is only the sap or juice of the tree or plant. This being the nutriment of the plant and is conveyed upwards and downwards, depositing in its course its various contributions to the growing structure of the plant. While the thin walled cells in the nectar producing tissue allows the sap or juice to flow out on to the surface of the nectary, there to be gathered by the bees.

Nature seems to have been less kind to us on the coast as regards the colour perhaps, but she has compensated us by giving us a more medicinal honey.

I know all about the brotherly love among beekeepers. The beekeeper in the box country is always praising up his honey to the detriment of the coastal man when talking of export. Says if it was not for him with his inferior stuff, we would not have to talk about sending our own away. To illustrate the colour fad or fashion I quite agree with him there. Public fashions like public opinions are not always right or best. This peculiar flavour of the coastal honey, is due, no doubt, to the more herbarious plants from which it is gathered. If sap is honey, which contains essential oils, and if these

are lost, I say that the most valuable, medicinal, and tonic properties are gone. I shall have more to say on this subject when I have time to look it up.

SCOTLAND.

Extracts from a very interesting letter by an old friend MR. J. N. MICKLEJOHN.

I am glad to learn that the past season has been on the whole fair with you in the honey harvest. I just trust your prognostications of the next season may be realised, and that your extended operations may be a success, and that you will have health and vigour to go into the management of it. We have had splendid weather so far in Scotland this summer. Much of it has been hot and making near approach to your summers. The crops look very well and betoken a good harvest. The country all over has on its summer dress, and looks very beautiful indeed. When the hawthorne, broom and furze were in bloom they looked magnificent. Then the fields were covered with a mass of daisies and now white clover. The people of Scotland attend more to the cultivation of flowers than they did in my youth, and so the wealth of the flowers about this and most other districts is astonishing, and such taste is bestowed on the laying out of their gardens is very creditable indeed. God's Acres are not the neglected places that they used to be in this country and too frequently in Australia as well. I was in a large cemetery two nights ago, where some of my dear ones sleep, and were it not for the multitude of substantial monuments on the grounds, its situation, arrangement and magnificent appearance, was beyond all praise. Indeed I could not help wishing that when I shuffled off this mortal coil that I should find a last resting-place in this spot. It is verily exquisite. I have been trundling about the country, but only in the immediate neighbourhood and there is much to be seen of thrilling interest within a radius of 20 miles from here. Taking things quietly I have as much to see here without going very far as I can overtake during this summer. I have been sailing on and skirting some of the lakes made famous by Sir Walter Scott. I have been in Clan Alpine country, and have stood at Corlintonle Ford where Roderick Dhu and Fitzjames had their set too. I have seen the hill still covered with ferns and copse where Roderick's fiercest warriors appeared to the astonished Fitzjames with bough spears and bended bows. I have been over Bochastle plain, where Rome of yore unfurled her eagle banners. I have been up among the haunts of Rob Roy, all peaceful, silent, and beautiful now. I have explored the great Roman Camp at Ardach or Mons Granpims, and have traced out the Roman roads across the Ochil Ranges. Of course I go

to Stirling very frequently. Yesterday I went to Tullibody, a very ancient little place, and the birthplace of Sir Ralph Abercrombie, the hero of the Nile. His dust is in St. Paul's, London, but most of his family lie here. Then I went to Cambus Kenneth Abbey on my way home. It is a sad ruin since monks, priests, and kings frequented it. Indeed, it has been made a quarry for supplying stones to people for building their houses for the last 300 years. Our forefathers were ignorant vandals and no mistake, but I suppose they went on the advice of some of the immediate followers of John Knox, who were reputed to say, "Pull down the nests and the crows will flee away. I saw the tomb there of James III. and the stout coffin in which his body was enclosed, now utilized for growing flowers in, like a flower box. Over the spot where the remains of the King were found a beautiful monument was erected about 40 years ago by our late Queen Victoria to mark the spot of this, one of her ancestors. The country all around this place teems with historic interest. I have been at the great Exhibition in Glasgow. I spent altogether about 20 hours in it, but I would require to go back and do another 50 hours in it. It is simply a bewildering show, and must be very considerably in advance of any other Exhibition that has been held in the British Isles. I was glad to see that two of the Australian States had entered prize enough to patronise the show. Queensland and Westralia have very fine exhibits and form a centre of attraction to visitors. I am rather disgusted that the other states show nothing. My opinion is, and I know it is the opinion of very many, that had all the States come forward with the same gusto, Australia would have carried the palm over all exhibits. I think it most unfortunate that the production of the whole of Australia are not more prominent. It would have been a fitting sequel to what she has done for the defence of the Empire, and would have kept her importance and splendour before the eyes of the whole world. There are visitors from all the ends of the earth, and I must say I don't think it creditable of Australia to allow Japan, Persia, Morocco and Turkey to be to be forward as extensive exhibitors while she lags behind. I noticed a honey exhibit but it was not Australian. I am sure if the beekeepers of N.S. Wales had been alive to their own interests they would have had such an exhibit that would have eclipsed anything I saw there. They have lost one great opportunity of showing their bee products to the world. Indian tea planters are not so indifferent as to the pushing of their wares. You can buy a pound of tea at their stalls independent of their exhibits. Fruit can be bought at the Canadian courts, wines at the French, precious stones at the Indian and Persian. The products of Japan and Russia can be procured at their respective

courts. And why in all the world could not N.S. Wales have had a honey exhibit, and besides a large assortment of honey done up in an attractive style and for sale at a cheap rate. I submit that no better opportunity could have been attainable of bringing the article and its excellent qualities under the direct observation of the British public. I call this trifling, sending home honey to middlemen to dispose of. What do the most of them care much whether a demand is created. They get or keep the fat commission on its sale, and the poor producer must whistle for what is left. Not until a more business-like way is adopted to bring the article into its proper place as an article of heathful food, can the beekeepers of N.S. Wales or any other state expect to make any headway. My candid opinion is that the united beekeepers take the matter in hand and keep it in their own hands. Honey of the best sort (rubbish won't do anything but spoil a market), put up in attractive jars that could be sold in England at about 1s or 1s 2d per a 2lb jar would soon take on. But they must have a pushing man or two of their own, whose whole and undivided attention must be given to the matter. My experience is, as I have told you at your own home, that the thing can be done at the above prices, and would yield returns to the producer of a much handsomer kind than the miserable 2d or 2½ which I see the Sydney papers quote as the ruling prices. As to cost of landing it in London, packing in tins, etc., I am sure 1½d per lb would be ample. You may remember, I sent two or three cwt. home about three years ago. Packing and carriage from Ardglen cost something like ¼ of a penny to London. Two of the cases were broken open in a workmanlike manner and about 40lbs were stolen. Of course I don't take notice of that. I only hope when you beekeepers try a similar experiment in shipping your consignments may not fall into the hands of such lovers of Australian honey. I was going to offer some suggestions as to what might be done in the matter, but must postpone doing so till a future time, having to post this at once.

TO PREVENT SWARMING.

G. M. DOOLITTLE, in *Gleanings*.

My plan to prevent swarming at the commencement of the honey-flow has been to stop them by way of a moderate increase, by the following plan: Shake all the bees and queen from a populous colony into an empty hive—that is, a hive having frames filled with foundation, and a super on containing sections filled with thin foundation, for this shaken colony will contain a half more bees than

would a swarm from the same hive. The combs taken, freed from bees, but full of brood, are arranged back in the old hive, when I move another colony to a new stand and place this hive having the combs of brood in its place, giving them a laying queen. This last colony moved may be the weaker of those which have not swarmed, as any colony strong enough to think of swarming at all will furnish field-bees enough to care for the brood, providing the change is made at a time when the bees is flying freely. You will see that I make one new colony from two old ones, having all in the best possible condition to store comb honey by the time the harvest arrives."

Now, if we have decided that prevention of increase will be more profitable than further increase, when a swarm issues catch the queen as she is found running around in front of the hive, and place her in a wire-cloth cage, kept on hand for this purpose; spread the combs a little in the centre of the hive, and then by means of a wire attached to the cage suspend it in the centre of the hive, and the bees will soon return. The first queen-cell will be due to hatch in seven days; but if we wait the seven days and cut off the queen-cells at that time the bees will have brood still young enough so they will start cells over the larvæ, and often cherish these cells, raising a queen from them and killing the old queen when liberated, thus destroying the usefulness of the colony, as a queen reared from such brood is practically worthless. So to overcome this difficulty I open the hive in four days and cut off all the queen-cells which are sealed, allowing the rest to remain, which satisfies the bees so they do not build any over brood. I now wait six more days, or ten days from the time the swarm issued, when all queen-cells are cut off and the queen liberated. The bees will now go to work in the sections, with a will that is almost surprising; and the honey that has been stored in the combs while the queen has been caged, together with that

coming from the fields, makes an aggregate which booms work in the sections to the greatest degree."

"But suppose that I do not wish swarms to issue; what then? Cannot the queen be caged without waiting for the swarm to issue?"

"Yes, I often hunt them up and cage them, putting the cage near the entrance in one of the frames, allowing it to rest on the bottom-bar to one of the frames not having the comb built fully down near one end. Where you cage in this way it is necessary to cut the queen-cells but once, unless you find some nearly ready to seal, for none will hatch from those built over brood before the eleventh to thirteenth day. Therefore, if we cut the cells on the tenth day and liberate the queen we are all right. But where a swarm has not issued, the bees will not always be satisfied without trying to swarm, if the queen is released in ten days' time, so on cutting the cells at this time I put a plug filled with queen candy in the cage, which is long enough to take the bees three or four days to eat out the candy to get to her, thus liberating her."

"This candy is put in a hole bored through the centre of the plug?"

Reduction of Fees for Ringbarking.

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

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

Will members of the N.S.W. Bee Farmers' Association, or other beekeepers, have a say on this important matter, and advise if any steps should be taken on behalf of beekeepers at once.

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Select Tested Breeding Queens	15/-	42/-	65/-	—

H. L. JONES, Goodna, Queensland.

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