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West Maitland, N.S.W.: E. Tipper, January 28, 1901

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THE AUSTRALIAN Bee Bulletin.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

EDITED AND PUBLISHED BY E. TIPPER.

VOL. 9. No 10.

JANUARY 28, 1901.

PER COPY. 6D.

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In Well Made **LEVER TOP TINS**
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The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

— Edited and Published by E. TIPPER. —

MAITLAND, N.S.W.—JANUARY 28, 1901.

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

Supply Dealers.

R. K. Allport, Chuter St., North Sydney.
A. Hordern & Sons, Haymarket, Sydney.
The W. T. Falconer Manufacturing Co.,
Jamestown, N.Y., U.S.A.
J. Pease, 8, 9, 10, Newtown Rd., Sydney.
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Jas. McFarlane, Lyndhurst, Victoria.
Mrs. Jennie Atchley, Beeville Bee Co.,
Texas, U.S.A.
J. W. Miner, Ronda, N.C., U.S.A.
R. H. Jervis, Moss Vale, N.S.W.
S. C. Strand, Longford, Tasmania.
T. Bolton, Dunkeld, Victoria.

Miscellaneous.

A. Hordern & Sons, Haymarket only,
Sydney.
Allen & Co, 242 Sussex street, Sydney
Anglo-American Publishing Co, Water-
loo Chambers, 458 George street,
Sydney
The Farmers' Co-operative Company,
Ltd., Sussex street, Sydney.

THE FEDERAL ELECTION.

The Beekeepers of the colonies have a duty to perform to themselves during the forthcoming Federal elections :—

ASK EVERY CANDIDATE.

1. Will you do your best to see the forests of the Commonwealth are not wantonly destroyed as is being done in too many places at present?

2. Are you in favour of, and will do your best to push on the establishment of Government stores on the banks of the Thames, England, where Australian produce can be sent and sold as Australian produce?

3. Will you urge on Imperial Federation, and the adoption of a policy by Great Britain, whereby Australian produce and honey, will have a preference to produce and honey (say 1d or 2d duty on such) from California, South America, and other countries not belonging to Great Britain, and where she does not get her soldiers from.

THE yellow boxes have done their blooming, and the forest apple trees are now in full bloom, looking beautiful with their white density. Last year they looked as well as now, but there was no honey in them. There is honey this year, dark, and of the same peculiar burnt flavour so well known—a flavour which gradually goes off with keeping. It is well to leave a good deal of it in the hives to assist in wintering. We have had a little swarming, not a great deal. In many cases we have killed the old queen, so ensuring a young queen in the hive by leaving a virgin queen, or only one queen cell. Where a hive has been very strong we have artificially swarmed it as per manner given in previous numbers. Unless intending to go in for out apiaries, it is no advantage to have too many swarms in one locality therefore better to double back swarms on the hive they came from.

Pure cappings gives the yellowest wax. Old combs give darker tint. Exposure to the sun whitens wax.

THE public may not be aware, but we read that golden syrup (that much consumed article known also as treacle) has to be adulterated with glucose, otherwise it would crystallise or candy. We have all been reading of the loss of life by poisoning of beer drinkers in England, through the arsenic in the glucose used in the beer manufacture. Cases of poisoning have also occurred through eating golden syrup. Glucose, especially the cheaper sorts, which you may depend on is mostly used by manufacturers both of beer and golden syrup, requires arsenic in its manufacture. It is as well these matters should be looked after more than they are by the powers that be.

PUBLICATIONS RECEIVED.

A PREFERENTIAL TARIFF.

—PROPOSALS FOR GREAT BRITAIN.—

The above is the title of a work by Charles E. Ludowici, late President New South Wales Chamber of Commerce. We give a few extracts from it:—

"I contend that the same principles ought to be applied in dealing with foreign nations in matters of trade, as are applied in dealing with foreign nations from any other point of view. A man's first duty is to his family, and then to his country, and by country I mean it in the largest sense—the whole British Empire. Some day, perhaps, we shall no longer have any feelings of rivalry with foreign countries; but in the meantime, it is desirable to give practical effect to the principles we hold by giving material advantage to the people of our own kith and kin. I believe that doing so would tend in a very large degree to maintain and strengthen the feeling that we are all one nation, and would tend in many ways to bring about a stronger union than can now be said to exist."

"If we could have a recognition throughout the Empire that the products of the various dependencies would be treated on a different footing fiscally from the products of foreign countries, it would be another cord adding to the strength of the ties which already exist between the component parts of the Empire."

"France, Spain, and Portugal conceded preferential duties to the products of their colonial possessions. Holland allows her colonies to levy differential duties on goods imported from abroad, excepting Dutch."

"Without entering into the complications involved in a Zollverein, I would roughly suggest that England, by allowing the produce of her colonies and dependencies a preference at the rate of, say, 5 per cent., might afford them an advantage in her markets as against foreign competition which would be worth millions of money every year to their producing interests. While, on the other hand, the colonies and dependencies, by admitting British manufactures at rates, say, 5 per cent., less than those charged on foreign imports, might give them an advantage in their markets which would at once check the progress made of late years by foreign manufacturers in displacing them."

"The most definite action yet taken for the purpose of giving effect to this movement was that of the Dominion Government in 1897, when it introduced a tariff which practically gave all British goods imported in Canada a preference equivalent to 25 per cent., as against similar goods of foreign growth or manufacture. This result was affected in a very ingenious manner. The Act contained two tariffs—a general one imposing protective duties averaging 30 per cent, and a reciprocal one, providing for a reduction of duties on certain conditions."

The *Young People's Industrial Gazette*: Object—To stimulate the energies, educate the minds, and elicit the sympathies of our young people.

From the U. S. Department of Agriculture. "Proceedings of Twelfth Annual Meeting of Entomologists." "Regulation of Foreign Governments regarding importation of American plants, and trees, and fruits." "How to control the San Jose Scale," and "The Principal Insects affecting the Tobacco Plants." Should any of our readers like to peruse either of above, we will be pleased to lend such on 1d postage stamp being forwarded.

Honey well displayed in a grocer's shop is half sold.

Propolis mixed with olive or sweet oil is said to be an excellent salve.

Read Ligurians letter "Marketing Honey" page 230.

If a young queen be given to a populous colony of hopelessly queenless bees, the first demand is for drone eggs.—*Exchange*

Flying foxes are said to be despoiling the blossoms of spotted gum in the Upper Paterson district.

A Bee-Farmers' Circular in course of a few days. Been busy among the bees since coming back from Sydney, or would have done so before.

The Victorian Secretary for Lands has issued instructions to the bailiffs of Crown Lands to keep strict supervision over the matter of ringbarking on Crown Lands.

A Vermont beekeeper has found a tablespoonful of vinegar to 10lbs of sugar in making syrup for feeding will prevent granulating.

Show catalogues should have in view first, the increased sale of honey—the benefitting of the struggling producer, not the making of new competitors for him.

The Messrs Root have found that better results are gained from colonies fed half and half than one part water and two parts sugar.

If the heat of weather is such the bees crowd round the entrance, put something under the cover to raise it up and thus cause ventilation right through the hive.

Bi-sulphate of carbon is heavier than air, and when introduced into any nests or burrows, like water, flows into all recesses. It is inflammable and explosive.

A preparation made from propolis is said to have been used in South Africa for treating wounds, its use preventing suppuration, and causing the wounds to heal quickly, the same kinds of wounds being very troublesome previously, making many amputations necessary.

E. J. R., Wyee:—Honey is coming in freely now. We have no local market. January — Newcastle offering 8/6 delivered at Newcastle, pretty rough. Say 1/- for tin, and 1/- freight. Where are we then.

We are sorry to hear that Mr. Murray, of the Cairndhu Apiary, Shepparton, Victoria, lost thirty hives on December 12th, in a fire that destroyed a large amount of hay and other property. Mrs. Murray was the first to notice the fire, and with the assistance of others kept the flames

from the house. The fire brigade came on the scene, and a very much more serious loss, not only to Mr. Murray, but also to his neighbours, was averted by sheer hard work. The fire was, we understand, caused by a boy playing with matches in a neighbour's house. We express our deep sympathy with Mr. Murray in his loss.

The man who to make money injures his neighbour, has some reason for his misdirected energy, but the man who injures his neighbour just to satisfy his own personal vanity is a contemptible creature indeed.

In view of the visit of the Duke and Duchess of York to Australia, the Victorian Silk Culture Association contemplated a grand display of products including queen bees, for which a prize of £3 was to be awarded. We read since, however, owing to the death of the Queen, that trip is to be abandoned.

We have received from R. A. Thompson & Co., 180 Pitt St., Sydney, a copy of their Almanac Cyclopaedia for 1901. It consists of 300 pages, post 8vo, price 6d. It is one mass of valuable up-to-date information from beginning to end—historic, scientific, and political. We can most heartily recommend it to our readers.

The Royal Agricultural Society did not adopt our suggestions. Interested persons on the spot we presume used their influence to the contrary. We are satisfied however we did our duty in the recommendations we made. While in Sydney we found there are persons there who think it is quite right to win prizes at shows by means of prepared honey. One man, whose word we can thoroughly rely on, told us he had won a series of prizes at such shows with glucosed honey.

The American bee journals have not so much to say about kinds of foundation now. Lengthening bees tongues, and shortening the tubes of red clover is now the most prominent subject. Some writers consider it will take years to accomplish, others that a very few will do it. One asks is the red clover honey any good, and would the farmers take to it

for fodder for their stock. Bees with longer tongues will no doubt have a great advantage over those with shorter ones.

THE BEE-FARMERS' ASSOCIATION.

A Congested City.

Our Corresponding Committee meeting in Sydney did not come off the way we contemplated. Living as we do 235 miles from Sydney, we wrote to a place where usually there is any amount of room for plenty of such meetings. After waiting till the last week we received a reply it would be impossible to be held there. On inspecting one of such rooms while in Sydney, where usually are several reading tables with a fine library of books for the accommodation of visitors, the tables were removed, and on the floor some 48 beds, each about two feet apart, as many as the room could possibly contain. The manager told us he had turned away hundreds of applicants for that accommodation. A prominent Sydney beekeeper wrote us he would secure a place, and on his recommendation we placed it on our circulars. We arrived in Sydney two evenings before, spent an hour or two in the immense crowds everywhere. That was what may be termed a "larrikins night out," tin whistles, penny trumpets, kerosene cans, anything that could make a noise was dinned in your ears at every direction. We saw the illuminations, the crowded trains, foot-boards and roofs, every available space occupied and rushed the waiting crowds outside the restaurants, the said restaurants having notices on the tables, asking customers to hurry their meals in order to make room for others, and afterwards closed up, food being all demolished. We saw the grand procession, was close up to the great swearing in ceremony, heard the 10,000 voices, and saw and contemplated well the beautiful historic uniforms of the various branches of the great British army—uniforms that must shortly be found only in museums, and

uniforms that mark the new departures in the modes of modern warfare, and saw the illuminations that rendered many of the streets into so many fairy vistas. In due time we were punctually at our committee rendezvous. We were first. Enquired of the manager if arrangements had been made for a meeting of beekeepers there. He knew nothing about it. There were rooms upstairs where such could be held, but they were all occupied now—we presumed beds on the floors. He and his assistants were very busy, and looked tired. Their only work seemed to be to sell liquors to the constantly renewed crowds at the long bar—recruited from the hurrying crowds outside. Several genuine beekeepers turned up, and we found a small parlour with a little round table and three chairs. Here we talked matters over, going occasionally to the hotel entrance to see if we could see any person likely to be a beekeeper waiting, as it seemed useless to leave any message with the hotel people. No formal business was transacted under such circumstances, but the matters brought forward were discussed in a conversational way. One matter, viz., the basis on which the Association was to be formed received general support. As the Association was to be formed for the bee-farmers' benefit, it was felt that only bee-farmers or those whose principal occupation was beekeeping, should be admitted to the position of member. Amateurs and others taking an interest in bees, wishing to join should, when only proposed and seconded, to be admitted as associate members. All offices and membership of Advisory Committee to be filled by members only. One matter talked over has led to good results. The quotations of honey in the Sydney papers were alluded to as misleading, sharp people being in the habit of demanding honey in small quantities at the low prices quoted in the dailies. Correspondence with several journals has taken place on the subject. The *S. M. Herald* now places "at per 60lb. tin" at the end of the quotation; and the *Evening News*

has the following:—"Honey, dark, 1½d. to 1¾d. per lb.; medium, to 2½d.; choice, 2½d. to 2¾d. These are for half-ton and ton lots. Single tins up to 3d. per lb." As the meeting was not a large one, it was thought better to outline the scheme in view, to having the matter thoroughly discussed in the columns of the A.B.B. prior to the formation of the Association on a permanent footing. There was a very decided feeling that the interests of the occupation should be allowed no longer to remain in the management of amateurs, lecturers, and supply dealers. Next day calling at our postal address, we received two letters from persons who had attended and could get no information from the hotel attendants, and had gone away disappointed. Also telegrams wishing success, but excusing unavoidable absence. We might also mention we had with us at the time letters from prominent beekeepers, who were unable to attend through much desired honey-flow being on.

THE HONEY BEE.

R. HELMS.

Considering the many natural advantages the greater part of Western Australia offers to agriculture, a systematic pursuit of this industry will not only prove very lucrative, but the profit derived from it should surpass that obtainable in other parts of the Australian continent. The occurrence of an exceptionally large number of flowering plants, and among them many species profuse in the yield of nectar, is an obvious proof of this assertion. Excluding the tropics, upwards of 3,600 different plants have been recorded from Western Australia, out of the approximately 9,000 species found throughout Australia, which makes about 42 per cent. of the whole. The larger orders of plants, besides, happen to be good yielders of nectar. It deserves to be mentioned that over 500 belong to the order of *Myrtacæ* (in which the gums and ti-trees are

classed); 397 to the *Proteacæ* (which include the famous Banksias, Grevilleas, &c.); 151 to the *Epacridæ* (heaths), all good producers of an excellent quality of nectar; 54 *Labiata*, an order famous throughout the world for containing the best honey plants. The large order of *Leguminosæ* (pod-bearers) includes 460 species, 349 of which have flowers similar in shape to the pea-blossom, and 111 belong to the Acacias. All of these are free bloomers and much frequented by bees; those with the pea-blossom-like flowers, on account of their nectar (which is easy of access), and the Acacias principally for the pollen which they produce in profusion. As pollen is much required during early spring for feeding the larvæ these trees are very valuable on account of their flowering at an opportune time. A great number of the best nectar-yielding plants produce flowers over an extended period, and, with the great variety found almost everywhere, a succession of different flowers can, as a rule, be relied on in most localities. The fact is that except during a short interval between the height of the dry season and the beginning of winter, some species or other comes into flower all the year round, and probably will produce sufficient nectar to keep the bees in food without having to fall back upon their stored supplies. For this reason the greater part of the honey accumulated during the time of an abundant flow of nectar becomes available for the benefit of the beekeeper.—*W. A. Journal Department of Agriculture.*

THE EXPORT BOARD.

Our desire has always been to support any movement for the good of the bee-keeping industry. Twelve months ago, when the N.B.K.A. and the Government Export Board were endeavouring, but unsuccessfully, to get honey to export, we had no honey to send, but reading the accounts of success in poultry exporting, we sent a coop of 20 ducks, the produce of birds from one of the great Sydney duck farms. The following correspond-

ence will tell its own tale. They were all good birds, well up to standard weight. Out of the £1 received, 6s. 6d. had to be paid for railway freight, so for 20 ducks we received 13s. 6d., after waiting all this time. How would the honey have fared? Note the dates.

Sydney,
Aug. 15th, 1900.

Mr. E. Tipper.

Dear Sir,—Your post card of 13th is duly to hand. Account sales for Damascus consignment have not arrived yet, but will be sent out with cheques immediately on receipt.

Yours faithfully,
p.p. JOHN J. HORROCKS,
H.R.C.

Willow Tree,
Oct. 15, 1900.

Mr. J. Stephenson,

Secretary Board for Exports.

Sir.—First week in March last I forwarded you 20 ducks in crate, paying 3/6 railway freight on same. In April I received £1 from Horrocks & Son on account of same, so seven and a half months have gone by, and my ducks have returned me 13/6!! Would that have been the kind of returns if honey had been exported? Or is there more to come?

Awaiting reply,
Yours Obediently,
E. TIPPER.

While in Sydney recently, we called on the firm in question, who told us there had been 1/6 to come, and it had been sent on to us, but up to going to press have not received same.

A FEW VERY GOOD THINGS.

J. J. PARRY.

Mr. Editor,—Just a line to let you know how I am getting on. Well, of late I've not been well at all, and I think the bees have been following suit. I do not know how you are getting on, but there is very little honey coming in round here. I think the seasons are getting worse than better. I've a fair number of stocks, and all in good trim, but they are not putting in much surplus.

Very sorry to hear of Bro. Beuhne's bees disappearing so. I had two hives, very strong ones too, I thought were going the same way. My reason for them

dwindling, is, I think, to some parasitical complaint. My two hives I disinfected with carbolic acid and coal tar, painted the quilt and bottom board. I did not care about spoiling what honey was in box. Since treating them so, I must say, they are much better, not so many bees thrown out now.

Well, Mr. Editor, without blowing our own trumpet too much, I think we must sing our praises about the golden honey, after these poisoning cases you have heard about in England, which were caused through the beer being sweetened by glucose. A great number of people died from arsenical poisoning. I should like to ask what the Board of Health is doing to let such quantities of glucose come in this country without testing it, or knowing where it goes to, because its used in all the jam factories, by the lolly makers, and I should not be surprised if the common grades of sugar are not adulterated, with grape sugar (this being the solid form of glucose); another thing I might mention, is, that a lot of your sugars are not refined but bleached by sulphuric acid. I can't understand people buying cheap stuff, because the purest form of sugar generally met with in commerce is "lump sugar" and you don't see it used much in this country; 1-lb. of lump sugar has the sweetening power of 2-lbs of common, with the benefit of the impurities taken out. Commercial acid, by which this stuff is made, always contains a lot of foreign matter, especially arsenic, because in small quantities arsenic is one of the most widely diffused of all minerals. It is found accompanying many minerals, it is frequently present in "Iron pyrites and native sulphur" these from which the acid is made, hence the reason it finds its way into the sulphuric acid. The most healthy sugars are those from nature's laboratory, collected by the bees.

It is curious to observe the contradictions in the question columns, which often attend the observations of some of our leading bee men, and on whose judge-

ment many novices are disposed to rely with implicit faith, on account of their noted name. At some future period I may collect and arrange these various opinions, from the A.B.B. and others. But I don't intend any reflection on the value of the A.B.B. or any of my various brothers that write, but I think these things pointed out occasionally, tend to open discussion, and probably get the real facts of the case.

I have on several occasions written articles on honey, etc., also its uses, and Mr. Editor, I think may again sing our praises of the pure stuff, and the benefits that may be derived from it.

Well, honey we are told in the ancient times was venerated for its benign and curative virtues, especially in affections of the respiratory organs, and other internal complaints.

The usages of the ancients with respect to the treatment of all their complaints, were to anoint their bodies with olive oil, eat plenty of honey, then take a sun bath, and I must say at those times no remedy seemed so well adapted to the constitutional exigencies of man than the above. Nature with her unerring instinct indicated its real want. I must now leave off abruptly for the want of time. Wishing you all a Happy and Prosperous New Year.

WORK FOR THE MONTH.

Don't rob your hives too close. Be sure and have a thought for the coming winter supply.

Old and inferior queens it would be well to now get rid of, and either supersede or kill and double their swarms up with others.

Cut out drone comb, and keep all brood together.

There has been much swarming on lately. Where the queen's wings are clipped there is a minimum of trouble. The swarm is in the air, the queen on the ground near the hive. We remove the hive to a fresh stand, get a fresh

hive; take from the old one a frame of brood with larvæ, and place in the fresh hive, putting on old stand. Cage the queen and place her in it. The bees will soon come back. If the hive has a good record, we take care of any queen cells, placing them in West cell protectors. They generally hatch within a day or two. Place them where they can feed on honey as they emerge. You can make good use of them to supersede inferior queens. The removed hive, being depleted of its working force, the first queen that emerges will kill the others. Where virgin queens are expected to take their flight, be sure there is always young larvæ in the hive. It will save a general exodus of all in the hive.

Where swarms are in the air, with virgin queen or queens not clipped, a bucket of water and a dipper are useful to sprinkle them with and to cause them to settle. When settled, which they generally do before going to any distance, get a box or hive with a comb, on which is larvæ, place underneath swarm, and dump the swarm into it. If on a convenient bough, bring down with a sharp jerk. If the queen falls into the box the rest of the bees will run in very quickly. Let them settle, and remove to a permanent place in the evening.

A swarm-catcher of some kind is very useful. A bag, with mouth stretched on a hoop, fixed on a pole; or you can purchase what is termed a Manum swarm-catcher. Where there are tall trees, greater difficulty is experienced in catching swarms. A stone tied on end of string, attached to a rope. The stone is drawn over the limb where the swarm is, drawing the string, and with it the rope, which should be sufficiently long to draw up a swarm catcher on; the two ends to be held by person on ground, to shake the limb or bend it down, so the bees will

ANY matter on which information is required, if communicated to us will be immediately answered, or if of sufficient importance placed before the Committee of the Bee Farmers' Association.

fall into the hive or box prepared for it.

In one case lately, where a swarm settled high up on an overhanging branch, a charge of shot striking the limb close to where the swarm was, brought them down instantaneously into the prepared hive underneath.

ONIONS.

Dear Mr. Editor,—As my bees have not been giving me as much profit as I would like of late, and some people seem to insinuate beekeeping is overdone, it looks to me not out of place to look out for another way of making a fortune, and it has struck me that *onions* would be a capital idea. They are a splendid vegetable; there are many varieties of them, suitable for different purposes. What nicer than onions in soup; as a refresher about eleven o'clock in the morning how nice bread and cheese and onions, with a glass of ale, and before retiring at night an eschallot or two I feel assured is a remedy for insomnolency. There is much poetry, too, connected with the history of onions, and a wide field for literary expansion. Well, my idea is this. The onion industry has been sadly neglected in this colony, so let the Government take the matter in hand. If they could afford to send lecturers around to teach beekeeping, surely they could do so with onions. I am sure more people would take to onions than to bees. All that is wanted is for the Government to appoint lecturers to go round all the public schools. Of course lecturers could easily be got. There are several men looking out for such billets in Sydney now. Perhaps the one that has been a successful lecturer on bees might take the matter up. Then again, what an opportunity for money making to enterprising tradesmen. Special tools might be invented, various kinds of boxes for marketing; a good sale for seeds, also special pocket-handkerchiefs might be introduced. Last, not least, an onion newspaper might be started that would be sure to pay the enterprising

firm. Oh, yes, and the Government would doubtless set the Export Board to work, and the good people of Great Britain would be certain to take N.S.W. onions in preference to any other, and thousands of people would eat onions that don't now. Of course the *Agricultural Gazette* would give at least two pages to onions, and you may be sure the Royal Agricultural Society will erect a grand pavilion specially for onions. Dear Mr. Editor, is it not astonishing to think what a wonderful industry has been neglected, and I do hope these few lines will be the means of opening many people's eyes.

I remain, dear sir,

With best wishes,
JOHNNY GRAY.

ADVERTISER wants SITUATION IN AN APIARY. References.

H. MERTON,
P. O., Murchison.

WESTERN AUSTRALIA.

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

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"A. BEE BULLETIN."

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To my mind, the paradise of bee-keeping in Great Britain is the Isle of Man, and no beekeeper who has not visited "fair Mona's Isle" can quite realise the position of matters there. An island, barely twenty-nine by thirteen miles, surrounded by the Gulf Stream, where it is impossible to get more than six miles from its warm waters—which latter are so clear that the bottom can be seen 40 feet below the surface; whose mountains are high enough to be properly so designated, and yet not so lofty as to attract sufficient moisture to make the rainfall abnormal. The sides and tops of these highlands are one mass of bloom from May to October, where the purple heather (both the honey-yielding varieties), the golden furze, and the wild sage, forms in the autumn one complete carpet covering mountain sides, and descending deep into the glens. Can it be wondered at that tons of honey are produced here when it is known that the mean average variation in the temperature is only 16.7, where frosts are of rare occurrence, and snow is seldom seen save on the mountain tops.—Henry Bruce, in *Beekeepers' Record*.

FOR WINTERING.—Cover the frames with a quilt of heavy brown muslin just the size of the hive, without anything between the quilt and the frames. Take a strip of $\frac{3}{4}$ lumber 4 inches wide, and make a belt just the size of the top of the hive, which when placed in position, will rest on the edges of the quilt all around and hold it in place. Fill this four-inch space above the quilt full of dry sawdust; put on a cover that will not leak, with a brick or stone on it. Contract the entrance with blocks, to two inches in width, and without any other protection or attention let them remain untouched until apple-bloom next year when upon examination they will doubtless find their bees in excellent condition; and if the weather is warm and favourable, they can put on one tier of baited sections with good prospects of getting some delicious apple honey. The sawdust must be kept dry; and if the bees gnaw through the quilt in the spring,

before time for supers, it will be detected by sawdust at the entrance, and it will be necessary to replace the muslin with oilcloth, and put the sawdust in place again. The quilts when removed in the spring will be more or less propolized, but sufficiently porous to allow slight ventilation upward into the sawdust, which thus removes all moisture and impure air out of the brood-chamber, rendering it both comfortable and healthful.—C. H. Summerford in *Gleanings*.

CHOCOLATE ROLLS AND HONEY.—I have just returned from a European trip of three months. While it no doubt is not news to you, it was to me that the staple and universal breakfast meal throughout the Continent, with no exception, from Holland to Belgium, France, Switzerland, Italy, Austria, Germany, and even in the hotels of London, consisted of the regular breakfast of chocolate, coffee, rolls, and honey. Sometimes marmalade would be substituted for honey. No meat is ever served for breakfast unless specially ordered. With this breakfast our party consisting of 44 people, thrived exceedingly, doing steady hard work travelling for three months, no one missing a meal, which seemed to me remarkable, as it convinced me that there must be more nourishment in honey than is commonly supposed. It was all extracted honey, and most of it would not compare favourably with our Northern State production in flavour, etc. The consumption of extracted honey must be very great there. I saw no comb honey.—H. R. Wright in *Gleanings*.

If every colony were equal to the best what a vast difference there would be in our pocket-books after the crop is sold. Let us pick out ten of the best; and then out of the ten take five of the very best. Now, I mean the best in every way; not necessarily the ones having the most yellow bands. I think we should be satisfied with three, and not chase after golden bands at the expense of some more substantial quality. We want first, bees that gather more honey than their neighbours; second, queens that

will fill a hive full of brood in a short time, and put a host of workers on the field of action just when most needed. Third, gentle workers; fourth, markings or colour. Remember that the gold that comes into the beekeeper's pocket after the honey crop is sold, gives greater and more substantial satisfaction than the gold bands across the bees' backs.—*Progressive Beekeeper*.

In visting a farmer not long ago, he showed me his choice herd of dairy cows. As we passed along he would talk in this way: "This cow gave me last year 400 pounds of butter; this one 384 pounds; this one 418, and this one 300 pounds when two years old." I complimented him on having so fine a herd, when he replied: "Yes, they are quite satisfactory now, but it has taken me quite a number of years and a good deal of care to bring them up, but it pays." He has the same breed to-day that he started with, but by constantly breeding from the best he has, I presume, nearly or quite doubled the product from his dairy. Now, suppose that instead of trying to improve his stock, such stock as he had he had spent his time trying one breed and then another; or in improving his stables, or his butter-making implement, or marketing packages, or milking machines, what would have been the result? While he has not overlooked these smaller matters, he saw an open field for improvement which he occupied, and has made his business a success. Will beekeepers be as wise?—F. E. Crane in *Beekeepers' Review*.

WHY DO BEES SWARM? I think without doubt bees are incited to swarm because of something disturbing their peace. This is most commonly a crowded condition of the hive just at the dawn of the honey harvest. The combs are full of brood, the hive filled with bees, and the bees feel uncomfortably crowded and thus are impelled to divide up or swarm. That this is not the only cause is certain. Bees often swarm when they are not crowded at all. I think the most common cause, other than crowded condition of

the hive, is from lack of honey, I have often known starvation to cause bees to swarm out and push for a new home. Here it would seem that they could not improve their condition by swarming and we must conclude that a disturbed state impels them to act. An untidy condition of the hive also drives bees out or causes them to swarm. Many beekeepers have not infrequently had early spring swarms after a cold, disastrous winter. With spring came serious dysentery, and bees, queen and all rushed forth for a new home. While this does not seem so unreasoning as the last the final result could not be greatly different.—J. G. Norton in *A. B. J.*

When the comb honey was ready for market, I packed about 500 lbs. and went with it to Chicago. The year before there had been a large crop, and prices had ruled low for those times, and there was still some old honey in the commission houses there. I talked with many commission men. They thought about 15 cents was the right price for honey—possibly 16 for a fancy article. I knew from various sources the honey crop was light, and decided my honey must sell for more than that. I selected a good house, and told the manager he could have my honey if he would hold it for 20 cents. "Well," he said, "we have room to store it, and can hold it, if you wish, until you order it sold for what it will bring. But there is no use trying; we can't sell it for that price. "All right," I replied, "when I want it sold for less I will write you." Three days later a card came saying the honey was sold, and they could use more at the same price; that "buyers thought it an extreme price, but the quality was so fine, and the packing so attractive, it sold readily." In a short time my comb honey was all sold at 20 cents.—H. D. Burrell in *A. B. J.*

QUEEN REARING OVER AN EXCLUDER.—Answering questions, I understand Mr. Pridden to say that a colony is to be selected from which bees are to be taken to act as starters of cells. Put an ex-

cluder over the hive containing this colony, and on this excluder put a hive body. Fill this hive body with combs of brood obtained from other colonies. No queen is to be given to this upper story and no bees need be given, for the bees will come up from the lower story through the excluder to care for the brood. I do not know for certain why Mr Pridgen would leave matters in this condition for 12 days, but can imagine two reasons—one, that there may be no unsealed brood from which to rear queens; another, that a force of bees may have time to hatch out. It is quite possible he may have some different reason. The queen remains all the time in her own hive. At the end of 12 days the upper story is taken from over the excluder, still leaving the queen in the lower story, and the upper story with its now queenless bees is placed in any convenient place on a bottom-board with wire-cloth tacked on as a ventilator, so that no bees can escape and yet the bees have abundance of air. This may be accomplished by having a very deep bottom-board with the entrance closed with wire-cloth, or a frame the size of the bottom of the hive may be entirely covered with wire-cloth, and the hive placed thereon, hive and wire-cloth both being raised by means of a block under each corner.—A. B. J.

Trying to winter weak colonies is a weakness from which few novices in bee-keeping are free. No matter that he is told the chances are largely in favour of the loss of each weak colony in winter after it has lived long enough to consume most of its stores; no matter that he is told that two weaklings united will consume very little more stores than each one separately, the beginner gives assent to all that is said in that direction, but hold still in reserve the thought that as *some* weak colonies do pull through, *his* will be pretty sure to be of that fortunate number. Time and experience make him change his views, but the experience of others counts for little with him. There is one argument, however, that may prove effective when others fail. He is likely to

hesitate about trying to winter over several weaklings if you tell him in a convincing way that by uniting two weak colonies in the fall he will have more colonies in the spring than if he keeps them separate, and both live through the winter and spring. More colonies, mind you, for he has not yet reached that point where he counts more upon the number of bees he has than upon the number of hives that contain bees.—*American Bee Journal*.

J. A. Green describes in *Gleanings* a "Finding Box":—It consists of a rim of boards—that is, a box without bottom or top, 20x40, and 5 inches deep. Instead of a bottom this has a sheet of perforated zinc fastened about midway between the bottom and top of the rim. On a level with this zinc, on one side, a strip an inch wide is cut out of one end of the box, the opening thus left being covered with perforated zinc. On the upper edges a strip of tin is nailed, projecting inward a quarter of an inch. This is to keep the bees from crawling over the edges. If the ground in your apiary is level and all the hives the same height from the ground, you can make your box so that the zinc is on the same level as the bottom board. Otherwise, two strips of strap iron bent at right angles, and nailed to the end of the box so that they may rest on the front edge of the bottom-board, will serve to keep it on the same level. In using this finding-box the hive is lifted from the bottom-board and set crosswise on the back end of the finding-box before the bees are smoked down. When the bees are shaken into the box a large proportion of them immediately go through the bottom, where they remain, making it much easier to find the queen among those that remain on top.

MOVING A WHOLE APIARY A SHORT DISTANCE; A NEW PLAN.—I believe it is generally understood among beekeepers that it is quite impossible to move bees when they are working, without considerable loss. I moved my apiary the last of May, about half a mile without

the loss of any. This is the way I accomplished it:—In the day time I prepared my hives by tacking cleats across the bottom boards and bodies, and also covers. I removed the oilcloth so the bees could cluster up in the cover (my covers have a three-inch air-space, ventilated). At night I stopped the entrances and put them on the waggon, the box having plenty of straw in the bottom, with boards on top of the straw for hives to stand on. Then I hauled them over and put them down anywhere, and left them until next day, with entrances still closed tight. I left in the old yard two hives, one at either side of the yard, each with a little brood, and a few bees and plenty of combs. Next day I went over and arranged the hives in the places I wished them; then about eleven o'clock went to each hive, thumped it, began removing obstruction at entrance, smoking bees at the same time. I went home to dinner and found a few bees coming back, but not nearly as many as I expected, and they were fast finding the two hives that I had left. I let those two hives stay until the next night, then took them to the cellar and left them two nights and a day; took them to the new yard early in the morning; placed one hive in its proper position, took the combs out that had no bees on, and placed the combs with bees from the other hive in their place. I then closed the hive and went to the old yard to watch for bees. I do not think there were a dozen bees lost in the whole operation.—C. H. Pierce in *Gleanings*.

PROFITABLE BEEKEEPING.

BY LIGURIAN, *in Australian*.

Hundreds of empty hives today tell of the precariousness of beekeeping, and yet it is so fascinating, healthy, and at times lucrative a calling that it is little to be wondered at that many of the leading experts of the industry are so persistent that in spite of many losses they never seem to tire of going through all the work and expense of again establishing

an apiary that through some cause has become defunct. Of every 100 persons who endeavour to make a living out of beekeeping without experience I am certain not more than 5 per cent. succeed, and their hardships are so great in attaining that success that very few people would care to face them. In writing this I am referring only to scientific and modern beekeeping, and not to the ignorant box-hive method. To make a profit out of bees, a person needs five years' experience, a locality well-timbered with yellow box and redgum, and as many more varieties as possible, also a mild climate; then there is a possibility of producing from 10 to 20 tons of honey per 150 colonies of bees once in three years, just according to the ability of the man during the honey flow, everything else being equal. It may be just as well for me to tell how to make a loss out of bees, although I could not possibly enumerate how many or how vast the causes that go to make a loss in beekeeping. Droughts on the one hand, severe wet weather on the other, heat waves, scorching the buds off the trees, diseases of various kinds, all come to the beekeeper some time or another. Over some of these things we have no control, but many people who would like to keep a few hives of bees to add to their income generally find it the reverse to what they expected, because the locality is very often unsuited to beekeeping. They are so accustomed to see what is always termed "garden honey" in grocers windows that they fall into the error of thinking that garden flowers are the source from which honey is gathered, not knowing that "garden honey" is only a trade term. If I mistake not the main product of all highly-scented plants is not honey, but perfume, and the small quantity of honey that bees gather from a mile or two of cottage-gardening is not fit for consumption, usually having a strong peppery flavour. Of course, if a town is surrounded by a variety of good honey-yielding trees, the garden flowers are of value to build up strong colonies, which

will store a nice surplus of honey when the trees bloom. Therefore, the position of a person's hive plays a prominent part in the profits. Garden flowers will keep the colonies in their need, but little surplus to the owner, and a very inferior honey at that, whilst a good supply of our leading timbers will yield honey of good quality which will well repay the apiarist for his labour and outlay in keeping his apiary in good condition during the dearth of our worst years, or the severity of the longest winters.

MARKETING HONEY.

LIGURIAN.

There are many people who affirm that any industry to form a payable foreign market needs over-production locally. Whilst this is true in many industries, it will not apply to apiculture, owing to the peculiarities pertaining thereto. We cannot depend on the flavour of our honeys for six weeks, and can never forecast with any degree of certainty what the season's output will be. Victoria produces at times an abundance of really first-class honey, and such that is very acceptable to our own people, but its flavours are legion. If a beekeeper have six varieties of timber blooming at different times he will probably extract six different honeys. All may be good honey, but they will each have a different flavour. Sometimes these timbers will bloom without yielding any nectar; again a severe period of heat waves will cause the buds to fall before maturing. This shows how difficult a problem to solve is the foreign market with twenty different flavoured honeys one season, and none the next. Not so the butter industry, which is so often quoted as an example of what might be done with honey if we could only produce enough to export. Such criticisms show ignorance of the real difficulties that beset the way of the honey export trade.

Grass varies but little; it matters not whether the machinery treats Gippsland or Wimmera milk, they both compare favourably one with the other, and thus

we send tons upon tons of similar flavoured butter from our shores, which is readily accepted from African town to London city. If need be, the dairy farmer is able to grow suitable food for his stock. He does not lose control of the herd's food supply, which is to be eventually exported in the shape of butter. But bees fly where they choose. No one can arrange what they are to gather, nor what timber blossom they shall not visit. There is, therefore, no comparison between the two industries. Then, again, someone suggests "Why not blend all these different flavours into one?" This is impracticable, because some of the honey is of such a strong flavour that it would spoil the best we produce. As it is the very highest quality, honey only is quoted at 25s per cwt. in London, a price easily obtained locally. But 25s per cwt. is only 2½d per lb., and when we consider the expenses, even locally, at this price, the return to the beekeeper is barely sufficient to keep him solvent; therefore, if 25s is the price in London, it is morally certain we shall never export honey.

"The Drone," who is at the English market, apparently finds the difficulty there is exactly similar to the local difficulty. The British grocer makes all the profit, and, of course, it is the same in all Australian centres. He says an immense market awaits us if we can sell to the consumer. Just so. As a beekeeper, I should like us to get at the consumer in Australia, but if we find the difficulties so great here, are we likely to find them less in England? If we cannot rule the price here, how can we rule it there? Australian butter is sold at a payable price to the middleman, and the farmers here do not talk about reaching the consumer; but the beekeepers must be their own shopmen to obtain a payable London price. This is another difficulty the beekeepers have to overcome, which never troubles the dairyman.

Now that red gums have bloomed, honey is coming into the market more freely; the price is falling, and the middleman is holding off until he can get it

at 22s per cwt. He knows he can buy at that figure if he but waits awhile, for the average beekeeper, as a rule, is nearly always short of funds. Once in a while he secures a good yield; then he experiences a bad season, and so on, with the result that he rushes his honey into the market to obtain a little ready cash. The grocer wanting cheap honey visits the auctioneer, and rather than lose a customer the latter allows the grocer to purchase at almost his own price; thus, when supplies are good, values are almost decided by the middleman. The beekeeper's need of money forces him to sell without a good reserve being fixed.—*Australasian.*

INTRODUCING QUEENS WITH TOBACCO SMOKE.

HENRY ALLEY, IN *A. B. Journal.*

I have read the thousand-and-one methods given in the bee-papers for introducing queens, and none of them it seems to me, are at all practical. They all require too much work and trouble, and, so far as I know, none of them are reliable.

I never have practiced but one method for introducing either fertile or unfertile queens, and it is always attended with the best of success.

To be successful in introducing a queen, a colony must be put in shape to realize thoroughly their queenless condition, and this can best be done by letting the bees remain queenless 72 hours. This applies to colonies to which either fertile or unfertile queens are to be introduced. At the end of three days cells will be started but not capped, and then is just the right time to introduce a queen and make it a success.

When a queen is received, do not put the cage near the colony to which the queen is to be introduced. This is a bad practice and a mistake a good many beekeepers make. When a colony has been queenless three days, place the cage over the frames in such a way that the bees in the hive can have access to the food in

the cage, and in the course of a few hours the food will be removed, and everything being so quiet the queen walks out and takes command of the colony, and all goes on well.

Now, to make the introduction doubly sure, just blow a quantity of tobacco smoke in at the entrance of the hive—enough smoke so that all the bees will feel it. The best time to do this, and to introduce a queen, is just before dark.

Now, I cannot use tobacco as a good many people can; that is, I cannot smoke a cigar nor pipe, and so I was obliged to perfect some arrangement whereby I can fumigate the bees with tobacco, so I made a tin pipe in this way:

The body of the pipe is made of tin $\frac{3}{4}$ inch in diameter, and about 5 inches long; then a wood stopper at each end. A hole is made through each stopper, and the one placed in the mouth is shaped to fit the mouth. The stopper at the other end has a small tin tube run through it so that the smoke can be directed to any particular point. The pipe is held between the teeth, and the hands are then at liberty. Fill the pipe with fine, cheap tobacco—tobacco such as cheap cigars are made from is strong enough for bees, while the common tobacco used for chewing and smoking in clay pipes is too strong.

If too much smoke is given, and the bees commence to tumble out at the entrance, throw some grass on the alighting-board, but not enough to stop ventilation.

All my queens are reared in full colonies, and are hatched in nursery cages, and then the queens are introduced to nuclei in hives having four combs and frames 4x5 inches. These little colonies build up strong—so strong, in fact, that on hot days I will have nearly 200 of them with the bees clustered on the outside, and it is a handsome sight to look upon.

Each of these hives has a hole in the top, or cover, through which the feed is given to the bees. When I have 30 or 50 virgin queens to introduce, I place as

many cages with queens in them in a box and then get a plantain leaf for each hive. I then stop the entrance with the leaf, and blow a quantity of tobacco smoke into the hive through the hole in the top, and quickly shake the queen from the cage into the top of the hive. It does not require over 30 minutes to introduce 50 queens, and, what is the best part of it, I never lose a queen.

Fertile queens can be introduced in the same way; that is, they can be shaken out of the cage just as soon as the colony has been smoked. I gave the first method, as it will better suit most people.

DISINFECTING HIVES.

The Editor of the *British Bee Journal*, says:—There can be no more effective means of thoroughly disinfecting hives—in which bees have died through foul brood—than a painter's lamp. No organism can stand contact with fire, and the lamp referred to intensifies heat just as the blow pipe does the flame of a gas jet. Remove the paint from hives inside with a spatula—as painters do very quickly—and then with the flame—"scorch"—the surface of the wood without burning. Even the spores of foul brood would go down before that. Moreover, it does away with the need for repainting.

NUCLEI.

As to the making of nuclei by a division of colonies for the purpose of mating our queens, after trying every method that brain could conjure, I find none more satisfactory by which a large number of nuclei can be made with the least expense of labor and desertion of brood by the bees than to make my nuclei from an apiary a mile or more distant from where they will be permanently located, and are formed by lifting two frames of brood and bees, and one of honey and bees, placing them in a nucleus-box and closing tightly to prevent any escape of bees, and so on until all the boxes have been filled. After moving and placing permanently

they should remain closed over night, or at least twelve hours, by which time they will become partially reconciled to the separation, and, being out of their locality and in a new location, they stay where put. A ripe cell is at once given in a protector, or a virgin caged 72 hours.

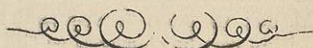
HONEY AS FOOD.

"Ruchen Belge" (Belgium) contains a long article on the value of sugar and honey as food, and above all strengthening constitution. Honey passes into the capillaries engendering warmth and stimulating muscular energy, acting on the respiratory organs and encouraging the action of the liver. After great fatigue honey will be found to restore most readily the brain power, being so easily assimilated. In 1896 two Italian scientists, Mosso and Paslitti, made special experiments on the most favourable conditions for the assimilation of honey, and their researches proved that this took place most successfully when taken in quite small doses, between 5 and 60 grammes. If more than 60 grammes (equal to 1½ oz) be taken, the muscular energy diminishes progressively, six or seven parts of water to one of honey giving the best results. Honey water is also recommended to jockeys, huntsmen, and cyclists, indeed to all who have to endure continued fatigue, as well as for hunters and sporting dogs. Honey should therefore no longer be considered a luxury, but an essential article of diet.—*New Zealander*.

PERSONS in want of HONEY in bulk, if they communicate with us, we will do our best to place them where it can be had. Same time, those who have quantities for sale, we shall be pleased to do our best for them by their sending samples and price. For these services we only want 4d. postage stamps to cover the necessary correspondence.

THE CORRESPONDENCE WE DO FREE.

All such communications will be private and confidential. Editor, "A. B. B."



JANUARY 28, 1901

The Australian Bee Bulletin.

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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My QUEENS have given GREAT SATISFACTION in producing most EXCELLENT HONEY-GATHERS, they are very PROLIFIC and HARDY.

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Untested Italian Queens ..	5/-	13/-	20/-
Tested ..	8/-	23/-	36/-

FOR SALE—Two second-hand Novice Extractors.
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VICTORIAN NOTES.

R. BEUHNE.

DISAPPEARANCE OF BEES.—During the month I have received further correspondence on this subject, and also obtained information in conversation. I have discovered two more instances which happened years ago of bees disappearing in spring leaving boxes full of honey. All the cases that have come to my knowledge, are in grey box country where no losses have taken place by disappearing. I appears to me that it happens in those years when grey box blooms late, and is the only honey gathered, or in other words is preceded by a dearth, and grey box thus forms the colonies sole supply for winter and spring.

One of the letters received is very conclusive, and I cannot do better than publish it.

Mr. S. Hallam of Telangatuk East, writes:—I have been much interested in reading your writings in A.B.B. re loss of bees, and the various answers thereto. I quite agree with your opinion, as it has been my own experience. My bees at home had nothing but grey box stores to winter, and in the spring of 1899 I lost 25 colonies leaving hives full of honey, and I had all I could do to save the rest, so I shifted some of the weak ones out about six miles to where there was white gum, and they survived and soon got strong. This spring it was the same, I lost about 12, and shifted some, you would not believe the difference it made. I kept 35 at home and they were weak until the weather became warm, and were superseding queens and swarming till the end of December.

Now, I proved the cause to be old stores. I got a fine swarm out of a tree at the end of August, and gave them combs of honey out of the honey house, the queen started laying nicely but I noticed that they were getting less and less, and in six weeks they were all dead. I intended answering Mr. Bolton's question re wintering on grey box stores, but did not get time. You are at liberty to publish this for the benefit of beekeepers who have only grey box to winter on,—Jan. 7th, 1901.

I shall be pleased to receive further communications from others to enable us

to draw conclusions, so that after summing up all we know on the subject we may be able to recommend some method to prevent such losses in districts where once in a while grey box is the only source of honey for the season. It may also throw some light on the subject of colonies in some localities nearly always dwindling considerably in spring. My own experience as to colonies left on winter stores remaining weak and losing their queens once and over again, justifies me to recommend to all who have suffered from the same trouble as myself to replace any brood combs having either old honey or pollen left in them. This can be done without loss of brood combs or anything else, by lifting half the brood combs into the super over queen-excluding board, replacing them with empty combs, and in about a week, or as soon as there are eggs and larvæ in them, putting the other half of the old brood nest into the super also, and filling up the brood nest with more empty combs.

GETTING QUEENS FERTILISED IN THE SUPER.

When brood is put into the super over queen-excluding zinc, a separate entrance, or rather exit, should be provided if there is drone brood in the combs, or many adult drones present, as otherwise drones will in their efforts to get out through the zinc, strangle themselves in the perforation, and besides thus obstructing the passages, the corpses can only be removed by the workers piece-meal.

If combs of brood are placed in the super, queen-cells will usually be raised on them, if the queen below is two years old or over, and unless the cells are removed there may be trouble with swarming, if bees are inclined to swarm. One cell may be left to hatch, or one given in a cell protector, and if the conditions of honey flow and temperature are normal will get fertilised and commence to lay in the super. I have on one occasion, taken six laying queens from the super of one colony. The essential points upon which success depends are that the queen below should be at least in her second sea-

son, and that the entrance of the super is freely used by workers, as otherwise the returning queen will enter by the main entrance, or go elsewhere to do mischief or get killed.

SENDING SWARMS BY RAIL.

During October, November, and December, I had a rather large experience in receiving bees by rail. They came over distances of from 60 to over 200 miles. Those coming the longest distance carried best, but only so no doubt on account of the different treatment they received before being despatched, and I believe on account of being more or less of Italian blood. Black bees, that is, swarms in transit boxes without combs seem to fare badly compared with Italians. That is probably owing to the former being more excitable, and not holding on so tightly as the latter. Every jerk sends them tumbling down to the bottom, and if they are overloaded with honey they soon become heated, and smother themselves in the honey they disgorge. They appear, however, to be able to fast longer than Italians.

A swarm despatched the day after it issued seems to have the best chance. The precautions taken by senders had in some instances the very opposite effect to that intended. "Live bees, keep cool" means to us as beekeepers to keep them in a shady airy place. The average Railway Porter, however, reads it differently, when the bees are put out of the train at a changing station, he drags a tarpaulin over the boxes to keep the sun off them the same as he does in the case of cream cans and butter boxes, nor can we blame him if he at the same time does the covering up partly for his own personal safety. Of course one could enlighten the people who handle them, the guards of trains and the porters at junction stations, but then there is the awkward fact that just when you are receiving a large consignment on a hot day, the man you carefully instructed has a day off or is temporarily transferred to elsewhere.

Strange bees fussing about the wire gauze of the imprisoned swarms are often the cause of annoyance, as they are so easily mistaken for escapees. If there are bees within a quarter of a mile, the scent and the hum of the imprisoned bees will attract them. On getting these transit boxes near the apiary they would always attract a lot of bees. The first impression of the uninitiated is that the bees are escaping and he takes precautions accordingly, not being able to find a leak he covers up the whole box. I have several times received boxes swathed in Saturday issues of daily papers, and tied up with string. This subject, however, is just now out of season, and I will leave the question of size and shape of transit boxes and various other matters for a future occasion.

—:O:—

A VICTORIAN BEEKEEPER AT THE FRONT.

We acknowledge with great pleasure the following valued communication from an old correspondent:—

Pretoria,
Transvaal, S. Africa,
15/11/00

Mr. E. Tipper.

N. S. Wales.

Dear Sir,—As one of your old correspondents, and as one of the old hands in the beekeeping industry in Victoria, I thought that you would like a line or two from the seat of war. As you will remember I am one of the firm of W. S. & H. J. Wilson, of Teesdale, Victoria, and am pleased to say made it a success. But the spirit of adventure seized me, and I slipped away to Durban, landing on a Thursday and enlisted in the South African Light Horse on Friday, joined the regiment in the field on Monday, and have been with it since. We have been with Buller the whole time. Of course, as you are aware, we saw some very heavy fighting, and had some fearful country to work North of Lydenberg, and round Pilgrim's Rest. As you may imagine, I kept my eye open, and anything in the bee line interested me. Most of the country we passed through was treeless veldt. While on duty escorting a convoy from Nelspruit, I came across some Australian wattles in a plantation, and with bees still in my mind, I went up to examine, and was greatly surprised to find them swarming with fine coloured Hybrids, some showing three bands distinctly. There was only one house near, so I enquired if

bees were kept, but was told, No! Not taking this for fact (one learns, while out here, to believe nobody) I made a search, but found nothing. I subsequently found on questioning the natives, that there were a good few hives in the crevices of the cliffs, and have been there for years. But what they lived on I am at a loss to know, for there were no trees beyond the few wattles, in the neighbourhood, nor a wildflower to be seen.

In the valley near Pilgrim's Rest our column halted for an hour or so. Close by where our troops were halted, was a large tree, sugar bush I think. Presently the native drivers commenced a corroboree, and running over to see the fun (I thought a fight was on) I found that they had found a bees nest in a hole at the butt of a tree, and had been poking at it. Some of the natives were only partly clad, and presented fine opportunities which the bees took great advantage of. I can tell you I fairly made myself sick with laughing at their antics. The bees had the best of it all along the line. After things had calmed down, I lit my pipe, and drawing a guernsey over my head, I took a good look at the hive. They apparently had only taken possession for they were hanging in a ball, and had only an inch of comb made. These were also hybrids. Now, where did these hybrids come from? I have visited dozens of Boer farms, but never once saw a hive of bees. I would not have wondered so much had it been down country, or in a timbered district, but so very far up north. Some one, of course, must have imported them at some time or another, but if it was a Dutchman, I am greatly surprised. I am keeping my eyes open for anything in the bee line, and will drop you a line if I find anything interesting. There is a native bee here about the size of a blow-fly, but has two yellow bands, one broad and one narrow. It is like the blow-fly in shape but works on the flowers just like any other bee. It also gathers pollen. I should like to find a hive of them and see how things look there. I don't know how long I shall remain in this country but I won't be satisfied until I am back in Victoria again, and in the thick of the bees once more. I hope you are having a good season, and that the A.B.B. is still to the fore. I trust that this war will soon be over, but I'm afraid there is a deal to do yet. Hoping you are well, and wishing you every success.

I am

Yours truly,

HENRY JOSEPH WILSON.

THE HOME MARKET.

P.M., Howlong.—I received circular of the N.S.W.B.F.A., but I am sorry that I will not be at the meeting. I think the objects as named are very good, and I

will do all I can to help to carry them out. I think if we also went for a registered label for the members of the Association it would be very good, for various reasons. It would show customers that the honey was guaranteed, and that being a member of the Association must have good honey and pure. You might bring it forward at the meeting, and see what is thought of it. The question of sending honey home is a good one, and I am sure if it was worked well it would do alright. I sent a sample tin (2lbs.) to a friend of mine 18 miles from Liverpool, in Lancashire, and I am sending you some extracts from his letter about it.

My idea is that a lot of the honey sent to England is never put on the market as Australian at all, only the worst of it. I know that when I was home about 12 years ago I have seen meat coming into the butchers' shops from America and other places, and yet none of this was sold as foreign meat. Oh, no! And I think it is the same with honey.

I am going to send a case of two 60lb. tins home, and my friend is going to sell same. When I get an answer I will let you have the full particulars. I want to know if you can inform me the best way to send to Liverpool, the cost, and particulars how I would send it from here, and you will oblige me very much. I am sending you a sample of the honey I sent home, so that you will see what kind he is talking about. It is from the red gum and yellow box, both being in bloom at the same time. This red gum grows on the river flats, and is later in blooming than the gum of the high ground, and the wood is different and harder. I do not know if the honey is any different. You will see if it is. You might tell me how it compares with other honies, as I have had no experience with other than around here. Wishing you success with the meeting and a good one, and hoping that at this time next year the Association will have become a power to control the beekeeping industry, and also a help to all our brother beekeepers.

See, or write to, the agents of ships advertised in daily papers as going to Liverpool.

Liverpool,

Oct. 25, 1900.

I received the tin of honey alright last Thursday. I took a sample, as you directed me, down to town, and went to a chemists' shop where they deal largely in it, and he sampled it, and said it was alright, appearing to be equal to our *English meadow honey*, and therefore as good as any. But, of course, he said, there is a lot in a name, and we cannot expect to get the same price for it as the English article. So then I asked him about the prices, and it seems to me about 1s. per lb. appear to be the average price, for the English (retail selling), and for the foreign article, he mentioned Californian, Chilian, Peruvian, and Canadian, but *Australian was not shown in the journal* he referred to, and the prices. He told me Chilian was the lowest, 36/- per cwt.; Californian the highest, £2 14s—I mean landing it in Liverpool. I have seen several people on the subject, and they all speak highly of it, one party with some authority on the subject. All the tradespeople I have spoken to hope I'll give them a look in when I receive the honey, with a view of doing business with me. I myself feel quite sure of it paying all right, if you can keep up to the sample you have sent me. I made two samples of the tin you sent me. You were right—it was hard when I got it. Don't forget to write soon, as I am anxiously waiting a reply. Perhaps in years to come I might go into the business altogether and do well, and come over to see you on a business footing.

HONEY RECIPES.

J. S. SKINNER.

I have thought several times I ought to write a few lines for the A.B.B., if only to show you my opinion. I see by December issue that A.H.V. suggests the idea of giving a few recipes of preserving with honey. I have never tried it, but honey makes splendid cheap drinks. Beekeepers, try the following:

HONEY BEER (Non-intoxicating.)—Water, 4 galls.; honey, 3 pints; handful of sarsaparilla or more, small handful of hops, and a few lumps of root ginger bruised. Place in a bag and boil well. When cooled to about blood heat add some yeast. Let it work say a day or two and bottle. This will not keep many weeks, but is fit for drinking at once. If more honey is added it would keep, but would be intoxicating.

LEMON SYRUP.—2 quarts of water, 3 or 4 tablespoonfuls of honey, 1 teaspoonful

cream of tartar, a small quantity of tartaric acid, a few drops of essence of lemon. Would soon find by experience the right quantities. If essence of raspberry is added it will make raspberry syrup, which I much prefer. Can be coloured with cochineal to imitate raspberry. This is a very cooling drink, and the other is a splendid tonic.

QUESTIONS NEXT MONTH.

311. Give ideas or suggestions relative to the working of the N. S. W. Bee Farmers' Association, especially having reference to the difficulty of having successful and well attended meetings owing to the long distances apart and the present increasing unprofitableness of the industry.

312. Have you tried making Honey Vinegar and with what results?

CORRESPONDENCE.

Mr. J. C. Clark writes: I forward you a clipping from *Pearson's Weekly*. I have read this before, but some of your readers may not. How would this affect the despised eucalyptus honey? "Respecting honey.—Your complaint of the honey "tasting of onions is not unusual. This "is caused by the bees gathering from "fields of onion flowers. If allowed to "settle for a few weeks before being "used the unpleasant flavour will entirely "pass off from the honey."

Good news, if true. The *Quirindi Gazette* informs us that honey will turn to wax if left untouched for some time.

C. P., Fyan's Creek, Vic.—The little bees keep me pretty busy at present. I started the season with 28 hives in very good condition. With swarms out of some, and some I caught in the bush, I came up to 43. Extracted by now one ton of honey, and hope to do very well this year. I had to clean my bees of foul brood last year, and lost through that a year's crop, but am not sorry, as they now do twice as well. Please answer through A.B.B.: (1) Is it safe to use extracted frames from foul brood hives which contain no brood, after being

dipped in carbolic acid solution, in brood nest of clean hive, and the strength of solution. (2) Best disinfectant for stand (i.e., ground and blocks) of deceased hive to be safe for clean hive again? Hoping you will have as good a season as we have, I remain, with best wishes for a merry Xmas and a happy New Year.

Better cut out comb and melt down. Lime or carbolic acid sprinkled on ground or blocks, but exposure to the open air for 36 hours kills all germs of Foul Brood.

E. W. W., Beechworth, Vic.—I herewith forward you my subscription for the A.B.B. I am very much pleased with it, and find much profitable reading in its pages, in fact it is an educator which I could ill afford to be without. I, like most of my fellow-beekeepers, had no honey last year, therefore very little money, besides being put to so much expense for feed for the bees. My bees were reduced considerably in numbers, with doubling up and dying out, but the prospects are much better for this season. I should like very much to say something about the many interesting matters that fill the pages of the A.B.B., but my time now is so fully occupied with the small fruits I grow that I must write you at some future time. Wishing you every success and happiness for the coming year.

F. W. P., Elsmore, :—I am sorry you got such a small crop of honey, you must be in a rather poor place for honey, but hope you will get a good white box flow. I had to give up going to Sydney at the last moment, as I heard that the Apple Tree was coming in bloom north from here. As I had three tons of white honey in the hives I did not want it mixed. As it was, about two tons was darkened. I have had a splendid flow here which kept me very busy up to the present, to-morrow will see the last of it off. Apple Tree is in bloom now but the flow will be light. White box to follow in about six weeks.

Our flow looked splendid in spring, but as fast as it came into bloom frosts would come and destroy all in bloom. It was the end of October before we could take any off.]

P. V., Brushy Hill, Dec. 18—Re duty on honey into Germany, I regret being unable to give the desired information for certain. Eight years ago when I was at home it used to be 0.05M. per lb., that is just 5s. per hundred-weight, but I don't know if it has been altered since. I have written to my friend, and I shall let you know as soon as I get the desired information. Bees have been doing fairly well; got about one 60lb. tin per hive up to now, and I started extracting October 23rd. Please hand my name in to "Private." I wish to join the Working Beekeepers' Association from the beginning. I have 90 colonies of bees, and depend on the produce of my apiary for a living.

G. F. F., Warwick, Queensland :—Bees doing well this season in spite of drought and casualties, so hope to make up for loss of bees and poor crop last year. I find I am able to obtain about 15 per cent more for my honey than other apiarists in the vicinity of this town, simply, I take it, by superior ability in selling. I will not take the low price that they have established by competing against each other, and by looking further afield I have had the pleasure of disposing of all my crop except last extracting at the highest prices I have ever realised. Wishing you Complements of Season and a successful year with Bees and *Bulletin*.

H. C. C., Braidwood :—I find the A. B. B. a very valuable paper, there is always something to be got out of it. It has been a very poor year for honey this season. I have not extracted much yet and there is not much prospect of a very great flow as there are not many trees in flower. I get 4½d for all I sell and could sell a lot more if I had it.

G. S., Tokokahi, N. Z. :—We have had a very fair season so far, plenty of honey, mostly clover honey. Hoping you have a good season for your bees and wishing you and your paper every success.

H. V. M., Burren :—Honey crops generally poor this season, and I think the man that can hold his honey until winter will see good prices.

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