



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The Australian bee bulletin. Vol. 6, no. 2 May 30, 1897

West Maitland, N.S.W.: E. Tipper, May 30, 1897

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

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

For information on re-use see:

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

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

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

THE AUSTRALIAN BEE BULLETIN.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

VOL. 6. No 2.

MAY 30, 1897.

PER COPY, 6d

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

COMB FOUNDATION MADE FOR 6⁰ LB.



As you have now cleaned up all your wax about apiary we can make it up into foundation (medium) for you at 6d a lb. This will give you a chance of having a stock of foundation on hand to start the season. Remember your wax will be thoroughly purified by being melted by our special process.

We have in stock a line of the "Monarch" Manufacturing Co.'s High-Grade *Bicycles*, imported

direct by us which we can do much lower than any Sydney House; also a line of best English *Lamps* from 4/-. Prices on application.

PENDER BROS.,

Manufacturers of Beekeepers' Supplies,
W. MAITLAND.

Can you buy the Timber as Cheap?

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

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

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

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

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

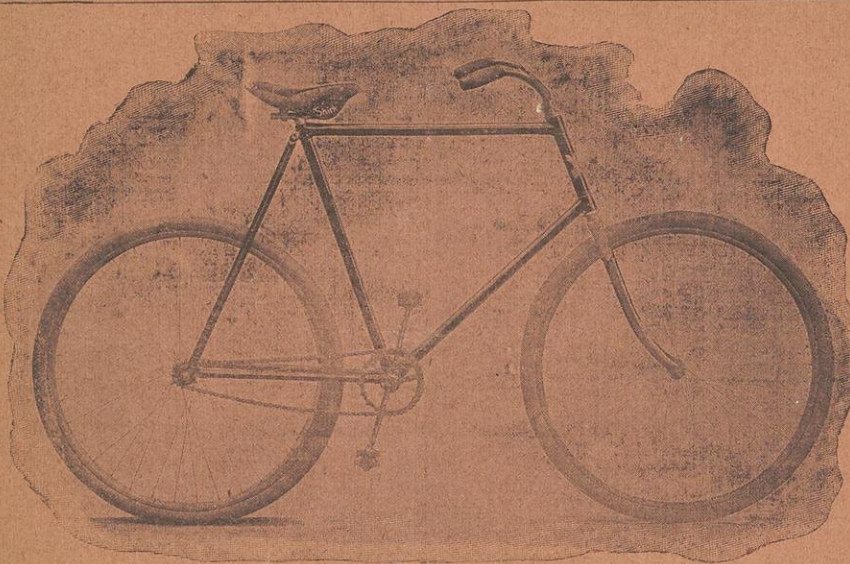
Hoffmann Frames, if desired, can be supplied instead of Langstroth at an advance of one half-penny per frame.

R. K. ALLPORT,
CHUTER STREET NORTH SHORE.

MAY 30, 1897.

The Australian Bee Bulletin.

Ride a "Union," £20.



Ride a "Shirk," £18

Or "TINKHAM" BICYCLE, £12 10s, guaranteed for 12 months; weight 25lbs.
BETTER THAN ANY BICYCLE SOLD AT £16.

HEBBLEWHITE & Co. 377 GEORGE STREET,
Opposite Sydney Arcade and Strand, SYDNEY.

The Beekeepers' Supply Co.
FRANKLIN STREET, MELBOURNE, VICTORIA.

Catalogue for this Season Now Ready, with Revised Price List,

CONTAINING THE FOLLOWING RECENT ADDITIONS—

THE LONGITUDINAL HIVE of 20 frames, with contracting boards, is specially a labor saver. It may be readily expanded or contracted to meet the necessity of the season. Two or more queens may be kept in one hive, and the stock amalgamated under one queen at any time, or the reverse proceeding be instituted for queen rearing. This hive will be found most suitable for the production of wax, supplying as it does ample clustering room.

THE REISCHE FOUNDATION PRESS.—This is without doubt one of the best recent additions to apianian appliances. Foundation may be made at very slight cost of labour. Capacity 3 to 4lbs. per hour. No other appliance necessary. Foundation made by this process, while somewhat thicker than roller-made, is lighter in texture and more readily accepted by bees.

V-EDGE HOFFMANN FRAMES.—Having put in requisite machinery, we now supply these at slight advance upon ordinary 7/8 Frames.

THE "COLONIAL BEEKEEPER," a handy Primer for Beginners. Price, 1/2 Poste

SEND FOR ILLUSTRATED CATALOGUE.

The Bee-keepers' Supply Co.,
FRANKLIN-ST., MELBOURNE.

A Big Honey Crop.

Is what all Beekeepers want, and to get it you must have good Queens. Upon no other one thing does the honey part of the apiary depend as it does upon the Queen. With a poor Queen, one that you must coax for eggs, your crop will be a failure. We all want good prolific Queens, whose bees are good workers and gentle to handle. After years of experience and constant importations I have succeeded in getting a strain of bees equal to any obtainable. The very best imported mothers only are used, and for industry, gentleness and beauty their bees are unsurpassed. I have a splendid lot of drones, and mismatched queens are rare. 95 per cent. of my Queens proved purely mated last season. You can have your choice, either Leather or Golden.

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

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

A. A. ROBERTS,

Rosebud Apiary, MUSWELLBROOK, N.S.W.

The New Zealand Farmer.

READ THIS POPULAR AGRICULTURAL JOURNAL.

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

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

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

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

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

Send your Subscription through any Stationer or direct to the PUBLISHING OFFICE, FORT-ST., AUCKLAND

First Prize COMB FOUNDATION. SIXPENCE PER POUND.

Beekeepers may get their Foundation as above on sending their Wax to us direct carriage paid. We will make it up for them at the price stated, and take either Cash or Wax, at market price, in payment. We have never advertised this line of our business before, because we have previously supplied the leading distributing houses in the colony. We are the original Comb Foundation Makers in the colony, and our trade was learnt with leading makers in England. We manufactured over three tons of Foundation last season. Our system is the same as followed out in England, and our Foundation requires less wiring than others.

W. T. SEABROOK & CO.

Orange Blossom Bee Farm, St. Ives, Gordon, N.S.W

SOME FINE QUEENS!

If you want any send along your order and see what I can do for you. Thanks to the magnificent season we have had this way, I have now on hand the largest number of fine young Queens that I have ever had. Can furnish leather-coloured Italian Queens from best American stock, or Golden Queens from my own well-known strain. If you require a good reliable breeder, I have the splendid leather-coloured Queens from A. I. Root, that I can do at 30/- each. I have doing duty a Holyland Queen, also a fine Cyprian Breeder from Mrs. Atchley, Texas, and can furnish daughters from these at per prices below. Queens are sent post free and safe arrival guaranteed to all parts of Australasia. We have no foul brood in Queensland and my apiaries are entirely free from disease of any type.

	One	Three	Five	Ten
Untested Italian Queens	5/-	13/-	20/-	39/-
Tested	8/-	22/-	35/-	65/-
Select Tested Breeding Queens	15/-	42/-	65/-	—
Carni-Italian Queens, Cyprian and Holyland	5/-	13/-	20/-	39/-

SPIDER PLANT I have on hand a large quantity of fresh seed (my own raising) of this noted honey producer, and can furnish same at 6d per packet, or 6 packets for 2/6, post free. I can also furnish seed of the new White Spider Plant (*Cleome Pungens*, *Alba*) at same price. Except in colour, which is pure white, this variety possesses all the good qualities of *C. Pungens*, and is one of the most beautiful garden plants. Send for my Illustrated Catalogue, free.

H. L. JONES,
Goodna, Queensland.

Queensland Agent for the "Australian Bee Bulletin."

A Convention of Beekeepers

WILL BE HELD AT THE

TECHNICAL COLLEGE, HARRIS-ST., SYDNEY

JUNE 21 & 22, '97

ALL BEEKEEPERS are INVITED to be present at the
College at 9.30 a.m. JUNE 21st.

SPECIAL CHEAP EXCURSION TICKETS will be available from all
Stations prior to that date.

Please notify to me your intention to be present and what subject you desire
to bring before the meeting.

W. ABRAM,
Beecroft, near Sydney.

May 25th, 1897

It is our intention, to get the next issue of the A. B. B. published by the 20th June at latest, in order to give the full arrangements of proposed Sydney Conference also report of Melbourne Conference. We would therefore ask correspondents to let us have their communications not later than the 15th inst.

The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

MAITLAND, N.S.W.—MAY 30, 1897.

THIS month is a slack one for the apiary. At one time it was recommended to take supers off, putting the frames in a room, so they could be fumigated occasionally, to destroy moths. Many, however, now prefer to leave them on, as the colony, if strong, will keep the moths in check, when they commence to breed in spring. The division board or follower, to keep the bees confined to a small space, and so warm and snug, is very useful for small swarms, though some French scientists, it is said, have proved by careful experiments, that brood combs answer quite as well the same purpose. Be positive there is plenty of food in the hive, if not there are many kinds and ways of feeding in the hive and out. Honey and sugar, not too stiff, given in cakes on top; inverted bottles with muslin tied over the mouth; the Miller feeder; combs made into what may be termed buckets by boards fastened each side, watertight and with strips of wood as floats; the Boardman feeder at the entrance, not necessitating the opening of the hive, or causing robbing; and open air feeding, by food placed some 30 or 40 yards away in the open. Some claim this last as best by inducing exercise and flight, while others say it induces robbing and you are feeding other people's bees as well as your own. The best plan is to

see they have plenty inside the hive to last the winter. Ourselves in extracting never touch a frame that has brood in it, always leaving the honey in such as a reserve.

Many double up weak hives, believing they winter better, by retaining more warmth, and the one stronger hive comes out and does better in the spring. Do this by gradually drawing the two hives together, a little every day for several days. Then put a new hive in place of the two, and put the combs alternately from each hive in it. Others would prefer to give combs from strong hives and so strengthen all weak colonies instead of doubling.

Those who have unfinished sections would do well to let the bees clean them up, they make excellent starters for next season.

The real work of the beekeeper is now to get hives and frames ready for the Spring, when swarming is on and they will be wanted. Better make or order at once, not leave it until they are urgently wanted, and put up with all kinds of inconvenience because you have not got them. And above all utilise the winter evenings by reading up whatever bee literature you possess. The knowledge now stored will all come in valuable as the busy time comes on, and there is no time for anything but work.

The best adherent for putting labels on tins is plain flour and water mixed, not boiled. Also, have the labels long enough to lap over at the ends.

We would remind our many friends that we do all kinds of printing in good style and at the lowest reasonable rates.

We acknowledge receipt of 1897 Catalogue of the W. T. Falconer Manufacturing Co., Jamestown, N. Y. As usual it is a very complete list of beekeepers' supplies with prices. Also the Illustrated Catalogue of Thos. B. Blow, Welwyn, England, full of up-to-date English beekeeping matter.

An important meeting was held in Sydney of the N. B. K. A. Committee last week, at which it was decided to

call a special meeting of the committee for Tuesday, June 1st, to finally consider the question of holding a Conference in Sydney this winter. The result of which will be given in number of *A. B. B.* published early in the month.

We have received from Mr. R. K. Allport a bottle of Easton's concentrated Soluble Phenol, a deodorising disinfectant. It possesses all the disinfectant properties of Carbolic Acid in a concentrated form, and mixes more readily with water. We would strongly recommend its use, not only in the apiary, but also for all other purposes where disinfectants are needed.

On our way to the Melbourne Convention, we placed several letters from correspondents, which we had received just as we were leaving, in a small parcel, intending to reply to them on the way. We are sorry to say by some means they got mis-laid. We had not opened them. We will ask the writers (as they get no reply from us they will conclude their's must have been in the said parcel.), to write us again. We are exceedingly sorry for the mishap. We attribute it to the hurry of getting away.

We trust, in our next issue to be able to publish a translation from the *Rheinische Bienenzeitung*, of a most valuable article on a new disease that has appeared in Germany, from the pen of Herr Schomfield, of Liegnitz, most kindly translated for us by Mrs. Vandeleur Kelly, a Sydney lady of high linguistic attainments, who has kindly consented to be a regular correspondent.

An "Eyewitness" from Tamworth, writes:—I see an item of the result of last Tamworth show. One in particular for liquid honey, first prize, a man who, I believe, never kept bees in his life, and would sooner go a mile than come in contact with them. I also see special prizes given by other beekeepers, and, of course won by them. Again at other times, judges and stewards have been principal exhibitors and prize winners. These little items make it very encouraging for beekeepers, and of course there is great competition, I believe in fair

dealing. Does not a man exhibiting at a show, exhibit to promote the sale of his honey, not to compete with *fancy bee-keepers* who never sell any honey, and keep bees only as a hobby. I have also seen honey dealers get prizes for honey that they bought in other parts of the country and put up as their own industry. These little matters disgust many beekeepers and prevent an apicultural show from being a success. There should be prizes to promote local industry and also special prizes for outside industry to be the product of the *exhibitor only*.

THE FORTHCOMING CONVENTION.

You all are aware of the regrettable fact that no convention took place during Easter week, and you know the cause. Since then a number of beekeepers induced me to make arrangements for the holding of such a meeting. I waited till the eleventh hour, expecting the proper authorities to make a move in that direction; but as nothing has been done, sooner than have no convention, I agreed to do what I can, and we decided that during the Queen's Jubilee Celebrations would be the most convenient and suitable time; 1st, because the issue of special cheap fares to Sydney will enable the distant beekeeper to attend same at very little expense; 2nd, because as there are public holidays all can afford to come; 3rd, because the bees require the least attention, and 4th, because of the imposing demonstrations, illuminations, fireworks, etc., etc., on the evening of the 22nd, you will have an opportunity to combine pleasure with business.

Through the kind intervention of Mr. H. Lord, Instructor at the Technical College, a room will be available on the stated dates. All station masters will give information re excursion fares, if applied to. Anything further, if requested, I will try and oblige you.

I would feel exceedingly glad if you will roll up, everyone of you. Do not forget to drop me a line of your intention,

and if you will favour the meeting with a paper on any subject, kindly inform me of it without delay, for obvious reasons. There are various subjects of general importance that need our attention, and should be adjusted, so there ought to be no scarcity in this respect—nor will there be.

Roll up! Roll up!! Beekeepers, Roll up!!!

W. ABRAM.

THE VICTORIAN CONVENTION.

The Convention in connection with the Beekeepers' Association of Victoria, which opened at the Town Hall, on Tuesday, May 25th, was attended by about fifty delegates, representing all parts of the colony. Mr. R. L. J. Ellery presided in the morning, and Mr. E. Tipper in the afternoon. The business before the convention was (1) a workable basis for the association; (2) foul brood legislation; and (3) export trade. The greater portion of the day was spent in discussing the question of a workable basis, but when the convention adjourned nothing definite had been arrived at. A draft bill drawn up by the Bacchus Marsh association, and dealing exhaustively with the question of foul brood, was debated clause by clause, and though several amendments were introduced the principal provisions of the bill met with general favour. It is proposed that all hives shall be registered, an inspector to have extensive powers in seeing that diseased hives are destroyed.

H. R. A. & H. ASSOCIATION.

The following are the awards at the show of the above, which took place on April 28th, 29th, 30th.:-

Most attractive display comb honey, A. J. Brown 1, J. F. Munday 2, George Paine commended.

Sections comb honey, J. F. Munday 1; A. J. Brown 2.

Most attractive display extracted honey, Geo. Paine 1; Pender Bros. 2.

Liquid honey, Pender Bros. 1; Geo. Paine 2, and highly commended; J. F. Munday commended.

Granulated honey, A. J. Brown 1; Geo. Paine 2; J. F. Munday highly commended; E. Tipper commended.

Beeswax, J. F. Munday 1; Pender Bros. 2.

Leather-colored Italian Queen and bees, A. J. Brown.

Honey vinegar, E. Tipper.

Beverages made from honey, Pender Bros.

Comb foundation, Pender Bros. 1 and 2.

Cookery made with honey, Pender Bros. 1 & 2.

Wire frame of comb foundation, A. J. Brown.

Colony of bees, Geo. Paine.

Beehive suitable to district, Pender Bros. 1 and 2.

HAWKESBURY SHOW.

J. D. CADDEN.

The Hawkesbury District Agricultural Association held a very successful show at Clarendon on May 6th 7th and 8th., being the 18th annual exhibition of the Society. The weather was fine, but a cold wind was blowing, still the attendance was very good. The judges were Messrs W. Abram and F. G. Daley. Mr. Cadden has been acting steward in apiculture for past three years, and decided not to exhibit. The following are the awards in apiculture:—

547 Best 12 1lb glass jars, liquid extracted Honey—Mrs Cadden 1, W. C. Barker 2.

548. Best 12 1lb glass jars Granulated Honey—Mrs Cadden 1, W. C. Barker 2.

549. Best 12 1lb Sections—Mrs Cadden 1.

550. Best and most attractive display of Comb Honey, to include novelties worked by bees—Mrs Cadden, 1, W. C. Barker 2.

551. Best and most attractive display of Extracted Honey, not less than 50lbs, manner of putting on market to be considered, labels allowed.—W. C. Barker 1, Mrs Cadden 2.

552. Best Soft Clear Yellow Wax, not less than 3 lbs. Six Entries. Mrs Cadden 1, John Gray 2 and H.C.

554. Best Large Frame Comb Honey, L size, 1st and second prizes to be equally divided between Mrs Cadden and W. C. Barker.

555. Best 2 small frames comb honey, $\frac{1}{2}$ L size—Mrs Cadden, 1, W. C. Barker 2.

556. Best Italian queen, with her bees in 1 frame observation hive, 4 entries, 1st and 2nd prizes to be equally divided between Miss A. Cadden and Mr. P. T. Plunkett.

557. Best collection Apicultural products in

trophy form of extracted honey, comb honey, wax and to include hives and appliances in actual use of exhibitor and his property, 2 entries, but only 1 put in an appearance. W. C. Barker 1; but a small lot and no honey or wax included.

Mrs. Cadden introduced letter writing by bees for first time in this district, and it was very attractive.

WELLINGTON SHOW.

H. NANCARROW.

It is some time since I had the pleasure of dropping you a line, but to tell you the truth things have not been progressing with our association as well as I could wish, and out of 60 members of last year I don't think half a dozen are willing to subscribe and keep the association going. Last year as you know we had a magnificent prize list and one of the best exhibition of products ever held in the colony. This year the members refused to contribute anything towards the show personally, but some would give large prizes as usual. I did my best to encourage them to keep the ball rolling, but all to no purpose. The result was only two of us competed, and one I am sorry to say who should have shown a better example only brought a few bottles of honey, observation hive, wax, and some comb. Last year he took up space to the extent of 15ft. x 4ft. and had a splendid exhibit and took a great many prizes. The season is no doubt a lot the cause of so much apathy. Messrs Cureton Bros. and I exhibited at Orange Show and had a splendid exhibit covering over a space of 40ft. x 3ft. 6in. It was greatly admired, as such a display had not been seen in Orange before. I also judged at Molong for the Association there and they had a very good display considering this is their first attempt. The association's exhibit was large and represented a multiplicity of goods made from honey and bee products. The prizes were awarded as under:—

Best trophy apicultural products, H. Nancarrow, 1.

Best observation hive, Cureton Bros. 1.

Best 12 1lb sections, H. Nancarrow, 1; Cureton Bros., 2.

Best large frame honey, Cureton Bros. 1.

Best shallow frame honey, H. Nancarrow, 1.

Best 6lb extracted honey (light), H. Nancarrow, 1.

Best 6lb extracted honey (dark), H. Nancarrow, 1.

Most attractive display, H. Nancarrow, 1.

Best 15lb beeswax, H. Nancarrow, 1.

Novelties made from products, H. A. Swan, 1; H. Nancarrow, 2.

THE MUSCLEBROOK SHOW.

We attended the above, and were really more than pleased with the splendid apicultural display, which the committee of the local B. K. A. had prepared. We believe we can truly say it was the best apicultural display that has ever been made in the colony. There must have been some 2000 articles altogether. Mr. Grant, the indefatigable secretary, had a splendid non-competitive trophy. Messrs. Roberts & Co. secured first and second prizes for two others. Mr. Ellerton and the combined association furnished two more, while around was a display in abundance of everything that a beekeeper would wish to feast his eyes on. The entries were very numerous, and of a really first class character all of them. Mr. Albert Gale was sole Judge, and his duties were by no means light, occupying very much more than the usual length of time. But his decisions gave every satisfaction. The Messrs. Pender had a good display of apicultural goods, together with bicycles. Below we give the list of prizes. On the second day an informal meeting of beekeepers was held, at which it was decided to hold a Beekeepers' Convention at the next annual show.

Collection of the Best Apicultural Products, in trophy form, to include extracted honey, comb honey, and beeswax, first prize £2, second £1—A. A. Roberts and Co., Muswellbrook, 1 and 2.

(Special prizes, open to all-comers; entrance free.)

Best Leather-colored Italian Queen and Progeny, bred by exhibitor, in one frame observatory hive. First prize 10s, offered by Mr. C. C. Paul; second 5s, offered by Mr. F.

Budden—Pender Bros., W Maitland, 1; W. Abram, Beecroft, 2; A. J. Brown, Parkville, highly commended.

Best Golden Italian Queen and Progeny, bred by exhibitor, in one frame observatory hive. First prize, 10s offered by Mr. W. Hill; second, 5s offered by Mr. H. J. Clarke—W. Abram, Beecroft, 1; A. J. Brown, Parkville, 2.

Best 12lbs Extracted Honey in 1lb jars. First prize 15s, second 6s, offered by Messrs. M. Campbell & Co.—W. P. Hill, Muswellbrook, 1; A. A. Roberts & Co., 2nd and highly commended.

Best 12 Pickle Bottles Extracted Honey. First prize 15s, second 6s, offered by Mr. J. C. White—Pender Bros., 1 and very highly commended; A. A. Roberts & Co., 2.

Best 12lbs Granulated Honey in 1 or 2lb jars. First prize, 10s offered by the Ven. Archdeacon White; second, 5s offered by Mr. W. P. Hill—Pender Bros., 1; A. A. Roberts & Co., 2nd and very highly commended.

Best 12 1lb sections. First prize, 20s offered by Mrs Wilson; second, 10s offered by Mr. R. T. Keys—A. A. Roberts & Co., 1, 2 and very highly commended.

Best 2 Large Frames Comb Honey, L size. First prize, 10s offered by Dr. Grigson; second, 5s offered by Mr. J. Hazelwood—A. A. Roberts & Co 1, 2 and highly commended.

Best 3 Frames Comb Honey, half L size. First prize, 10s offered by Mr. A. A. Roberts; second, 5s offered by Mr. D. Grant—Pender Bros., 1; Thos Ellerton, Muswellbrook 2.

Best 12lbs Beeswax. First prize, 10s offered by Dr Grigson; second, 5s offered by Mr. T. Ellerton—Pender Bros., 1; A. J. Brown 2.

Best 3 Sheets Foundation, made by exhibitor, 5s offered by B. K. A.—D. Grant, Muswellbrook 1.

Fruit, preserved in Honey, not less than three kinds, 5s offered by Mr. W. H. Lipscomb—Mrs J. Wilkins, Coal Creek, 1; Mrs. D. G. Grant, Muswellbrook 2.

Jam, made with Honey, not less than three bottles or jars, 5s offered by B. K. Association—Mrs. J. Wilkins, Coal Creek 1.

Cakes, made with Honey, 5s offered by Mr. Thos. Hewitt—S. W. Coombes, Kayuga 1.

Beverages made with Honey, three bottles, 5s offered by Mr. N. H. Doyle—W. Abram, Beecroft 1.

Honey Toffee, not less than $\frac{1}{2}$ lb, 5s offered by B. K. Association—R. S. T. Luscombe, Muswellbrook, 1; Mrs. L. E. Wiseman, Gundy, highly commended.

Honey Vinegar, 3 bottles, 5s, offered by B. K. Association—Pender Bros., 1.

(Open only to Members of the Muswellbrook Beekeepers' Association; entrance free.)

Best 6lbs extracted honey, in 1lb jars. First prize, 7s 6d, second 3s, offered by Mr. R. D. G. Fitzgerald—A. A. Roberts & Co., 1, 2, and highly commended.

Best six pickle bottles extracted honey. First prize, 7s 6d offered by B. K. Association; second, 2s 6d offered by Mr. W. Hornery—A. A. Roberts & Co., 1, 2, and highly commended.

Best 6 1lb sections. First prize, 10s offered by B. K. Association; second, 5s offered by Mr. W. Campbell—A. A. Roberts & Co., 1, 2, and highly commended.

Best Large Frame Comb Honey, L size. First prize, 5s offered by Mr. J. C. Luscombe; second, 2s 6d offered by Mr. H. Stubbs—A. J. Brown 1 and 2.

Best 2 Small Frames Comb Honey, half L size. First prize, 5s offered by Mr. J. Soles; second, 2s 6d offered by Mr. T. J. Haydon—A. J. Brown 1; Thos. Ellerton 2; A. A. Roberts & Co., highly commended.

Best 3lbs of Beeswax. First prize, 5s offered by Mr. E. C. Brecht; second, 2s 6d offered by Mr. J. McKenzie—A. J. Brown 1; Thos. Ellerton, 2.

271 Entries in this Class.

J. A. McF., Thelangerin, May 24th.—I like the little paper very much, and it often gives me great help. I often think when reading of beekeepers' troubles how they would envy me my beautiful apiary, not another bee within a range of 35 miles. These dreary Riverina plains do not favor beekeeping. Some few folks in and about Hay keep a little stock, but the Brewery there drowns thousands.

Everton writes:—At commencement of season I had two hives, one Italian, and one Black. Both colonies set to making queen cells, and I cut out cells from black colony, and made two artificial swarms from the Italian. One of these new colonies brought a good looking queen out, and has worked pretty well considering the bad weather we have had here; it gave 50 lbs of honey for the season. The other new colony has fared very badly; the first queen died in the cell, and then the bees tore out two cells, and the last cell I gave them turned out a very poor queen; about 9 lbs honey for the season. My Italian queen was still filling combs with brood, in surplus story too, so I made two more small swarms from the old colony about middle of December. Early in January, the old Italian queen died, so I introduced one of the queens from one of the last small

colonies I made, and she has layed as well as her mother did. This is one of the old colonies from last winter; it has given 88 lbs of honey and is still storing surplus, bringing in about 18 lbs a week since end of April. I united the two small colonies after taking one of the queens for the old colony, and the united is now the strongest of my small lot; the bees are still bringing surplus in this hive, it has given about 45 lbs so far. Although I kept on cutting out queen cells from black hive, I must have missed some, for it threw out three swarms, and of course it was made pretty weak; about 4 lbs of honey for the season. This is one of last winter's colonies. I have now 7 colonies, and think I will manage to winter them all right as all have plenty of stores. Altogether I have taken 200 lbs honey from four of the hives up to April 30th. Wishing success to the A. B. B.

C. B., Nailsworth, S. A., May 10th.—Just received *Bulletin*. We have been taking the *Bulletin* for a number of years as you know; we consider it a very useful paper. The honey flow over here has been a very good one this year. The dandelion plant is a very useful one to us as it blossoms very early in the spring, just when bees require honey and pollen, which it yields in large quantities, although the honey is of an inferior quality. We gathered all our harvest this year from the blue and red gum, and have never had a better flow. These two trees are our main honey producers; the nectar is of a most excellent quality, the bees gather it very rapidly from the red gums which only blossom for a very short time. The blue gum continues to blossom and yield nectar for several months. Of course these trees are not the only honey producers we have—there is the white gum, mountain gum, peppermint, stringy bark, the honey from these trees is of a dark color, and strong flavour. The bees this year were exceptionally strong, and you know Mr. Editor what that means, when they have a good flow to back them up. As our flow is generally of a short duration, and ex-

ceedingly good while it lasts, we have to make the best of it. To be successful the colonies must be built up strong to meet it, and while it continues must be given plenty of room in the supers. We usually have our bees strong enough to carry from one to two supers. Our apiary consists of a little over two hundred colonies situated on sloping ground, the honey house is on the lower side, We have a truck built to carry four Langstroth supers side by side, and by adding supers we can bring in from two to three hundred pounds of honey at a time; the wheels are about 9 or 10 inches high. We find this a easy and convenient way of bringing honey to the extractor. Next we have our extractor fixed to a low bench about four inches from the ground with sides enclosed to prevent dust, etc., from getting into a pan which we have placed beneath the bench. Beneath the extractor tap we have a large augur hole leading to the pan beneath the bench, over this hole we have a slide which we use when not extracting to keep dust, etc., out of pan. To this pan we have a 3 inch pipe leading to a strainer made as follows: in the first place funnel shape about 18 inches across the top, turn about $\frac{1}{4}$ of an inch of the top of the tin towards the centre so as to form a ledge, next stretch a piece of very fine mesh brass (as it will not rust) wire cloth across the top and solder to the ledge, then solder rim about 7 inches high on to the top of ledge; this enclosure is to receive the unstrained honey which passes through the wire cloth strainer, into a tank which holds about 3 tons; the tank will require a rim to hold the strainer in position. We allow the honey to pass from the extractor into the tank as we extract it, as by this means the honey will strain sufficiently fast to allow extracting room at the back. Well Mr. Editor, we must conclude, wishing you and your *Bulletin* every success.

Mr Lewis Turnbull, Geurie, Western Line—I take the liberty of penning the following incident to you, as it may be of some interest to beekeepers. In the end of February last I purchased a young

tested Ligurian queen from Mr A. J. Murray, of Maryvale, who will vouch she was no more than a month old then. On Friday last I opened the hive in which this queen was, when I was astonished to behold a queen cell hatched, and two queens promenading over the same comb, passing and re-passing as happy as possible. Mr Wood, a neighbouring beekeeper, and my wife were present at the time, and saw the two queens. I may say I took the young queen and put her in a nucleus, where she is now laying. The mother is also healthy and laying. I am aware of the habit of bees superseding an old or defective queen, but this is an entirely different case, for the existent queen was prolific, and not more than three months old when the daughter was hatched out of the cell. The hive could not have had any intention of swarming, as they were weak, only having four frames of comb—in fact one of the frames was only three parts full. You would confer a great favour on me and my neighbours, who subscribe to your paper, by kindly letting us have your opinion of the case, which I have herein explained.

As you are positive about the age of the mother, and as she is yet laying, proving her to be in no way decrepid, we give up. Will some of our readers have something to say on it?

T. H. jun., Glenrock, Grafton, May 10th.—I am glad to say my honey crop has been a good one, and bees are in good condition for winter. The only trouble I had with them this year was with swarming, and I could not stop them, with the result that I have 135 stocks to look after, an increase of nearly one hundred per cent. All small swarms I hived in half size supers, and set them to work out combs for extracting. My super frames measure 11 inches long, and $5\frac{1}{2}$ inch deep over all. Brood frames are 11 inches long and $10\frac{1}{2}$ deep over all. My hives are 18 inches long, 12 inches wide, and 12 inches deep, inside measure, and my supers are 18 inches long, 12 wide, and 6 inches deep, just half size, and I find the super frames are splendid for extracting in this hot climate. I and several other beekeepers have made a

start in the export business. I sent half a ton as a trial shipment, packed in 4 inch screw cap 60 lb export tins, and two tins in a case. The gentleman in charge of it, a Mr. Waterhouse, is confident of making the exporting of honey a success; he is a good business man and has a good connection in the old country, and will push the trade. I will let you know the result of trial shipment.

[We shall be very pleased to hear the result.]

J. D. G. Cadden, writes:—Not having written much this year, I have a stock sufficient to fill a special, but, knowing it is the intention of beekeepers to meet next month, I hope to attend and have a say; so brief is the word just now, simply saying,—1st That when Mr. Whittell says in March No. that it was intended to wind up N. B. K. A. and he had resigned as Secretary, I can only remark he has a perfect right to resign if disposed, but as for his winding up N. B. K. A. it is another matter. Many beekeepers ask what they pay 5/- per year for to be members of N. B. K. A. seeing they are in no better position than those who do not? And again officers and committee of N. B. K. A. have to pay their own expenses to transact the business affecting the whole. No, No, N. B. K. A., we can show a more excellent way, and all is ripe for June, and if only half the projects I hear of are introduced we shall see something new. 2nd The show season has been fast and furious, and the more I visit the more I am convinced of the importance of good judges or soon no exhibitors. I fully agree in remarks of a Sydney paper re judging in Apiculture at Royal Agricultural Show, and I am quite sure that holding office as Secretary etc. etc. does not qualify anyone for the position of judge in any class. Judges and judging is a matter I have given attention to since 1870. I have to thank Mr G. W. Gordon for his remarks. We have seen alike several times. Mr. Davies of Bowenfels says some very funny things. We had conventions before we had our N. B. K. A., and I give my opinion that Mr. Mausfield was

the best secretary ever we had. Reserving till June what I have further to say.

Mr. A. Parker, The Overflow Apiary, Nyngan, N. S. W., writes:—As I see by the *Bee Bulletin* that you are always asking for a few lines re beekeeping. Well I herewith enclose you a clipping from the *Nyngan Observer* February 27th also same appeared in the *Sydney Morning Herald* February 8th and you will see by the report that Mr Clarke of the Agriculture department was greatly taken up with the Overflow Apiary, and more so with the bees, as no doubt that fact may be accounted for on account of all the queens in the apiary are selected from the most noted queen breeders. I may also state that all young queens raised are of the very best, as all drones that are allowed at large are selected from such queens that show best marks on their drones, while on the other hand all young queens are raised from the very best mothers, so no doubt all this accounts for the high opinion given by Mr Clarke. The Overflow apiary is some 75 miles from Nyngan, Western line, and about 130 miles from nearest bee farm, which makes it much easier to keep the bees pure while Foul Brood is quite out of the question never yet seen in this part of the country and little or no wild bees' nests in the bush. Now Mr. Tipper, if you think there is nothing in these few lines I won't be out of sorts if you put it in the waste paper box. I suppose I had better conclude or you will be getting full of me before you know me, so good bye. The following is the paragraph alluded to:—

During his recent visit out west the Minister for Mines and Agriculture was surprised to find a large apiary in existence at the overflow station, of which Mr. R. S. Kinnear is manager. An officer of the Agricultural Department states that the Overflow apiary is not surpassed in extent in Australia, and that it is at least 10 years ahead of any thing yet done by the state. In a good season the production of honey is equal to one ton a week.—*Nyngan Observer* February 27. 1897

Mr. C. U. T. Burke, Loyalstone, Lyndhurst, writes:—I did fairly only with queens this year, but believe I got

more honey per hive than anyone else in the district. It was not a good honey season, being too dry, my largest take this season was 205lbs from a hybrid hive. I have not had time to answer questions for next month and do not think I will be able to get away to the conference as I have not quite finished building. Re your question as to disposal of surplus honey. I do not think the beekeepers exert themselves enough in the matter and do not take enough trouble in getting their honey up for market. It is an old and true saying that a good article will bring its price in the market at any time. Honey is a low price in the Sydney market at the present time yet I sold some last month (a considerable quantity) in the heart of Sydney (George street) at 3½d a lb. One of my brothers in Sydney shows some of my honey round now and again and people that take it say they would sooner take my honey at 1d per lb extra than buy the honey selling at auction in Sydney. I never sell my honey lower than 3d per lb and never get enough to supply my customers the year round. I never sell any but first class honey, and extract and get it up in such a way that I never have inferior honey. If beekeepers like to stir themselves they will find that N. S. W. cannot supply near enough honey at 3d per pound for the population. I am sorry I have not more time at my disposal to comment on other things in beekeeping at present, but when I have any time to spare you may expect a lengthy contribution from me to either publish or put in the W. P. B. About the end of next month I will have plenty time to send you a scribble now and again I must now close wishing you every success at the convention and trust you will do good work re Foul Brood Act, exporting honey and trying to form a large beekeepers' union with intention of letting everyone get a fair price for his honey and try to do away with that noxious middle man. Hoping you had a good honey season.

STRATFORD TO DARGO.

BY THE GIPPSLANDER.

Stratford is situated on the Avon river, about eleven miles from Sale, the capital of Gippsland. It is surrounded on the South and West by the rich valley of the Avon, and on the North and East by good grazing land. The rich flats on the river are covered with white clover, and rye grass, and a great many thistles. It was here that quite a number of bees were kept in box hives at one time, the largest bee-farm being that of Mr. Little, who had as many as eighty hives stacked one on top of the other, sometimes three or four high. Nearly all the hives were close together on the one stand. They did very well for years, but all at once they began to die off, and the owner was at a loss to account for it, but I suppose foul brood was the cause. It must have had quite a good old time while the brood lasted, at all events it went right through the bees about Stratford, for at present there are very few left, and I have never seen a frame hive about the town. It is for places like this that a Foul Brood Act and Inspector is wanted. All the timber is dead around the town which helps to account for the bees dying out, for the clover is not much good in dry seasons like the last three or four have been. After leaving Stratford the country is much the same as where the town stands; all the timber is dead and very few honey plants, except Dandelion, until we reach Black Hall Creek, about six miles out. Here we see some green timber with some shrubs that yield honey, but as it is selected it is a question of time until it becomes as bare of trees as it is nearer Stratford. There is not much to interest a bee-keeper until Stockdale is reached, which is 17 miles from Stratford. It is about six miles west from here to Mr. G——'s bee farm. He keeps over 100 hives and his place is a picture well worth looking at. His apiary and buildings are enclosed within a neat fence and everything is nicely painted. Anyone can see he thoroughly understands the business

by the neat appearance of everything about his place. Mr. G—— was a bee-keeper in N. S. W. at one time, and he uses a frame about two inches shorter than the L. frame. About a mile from Mr. G——, Mr. B—— kept a good many hives at one time; he also struck a good hive on one of the hills in the shape of a quartz reef taking out a lot of gold in a few months. He is still keeping bees at Prospect, where he has a selection. A few miles further on Messrs H—— & W—— has over 100 hives. They are both young men and have great faith in the business. They have spent a lot of money and time but had a bad run of luck for two years, but it is better now, for the past season gave them a chance to make up some of their losses. Stockdale is a small place on the junction of two roads, one leading to Briagalong, the other to Stratford and is at the foot of the Australian Alps. It is the end of selection, and every mile a person travels is taking him higher up into the mountains. Viewed by a beekeeper it is more interesting than any part of the road we have travelled, for here we have the different kinds of Eucalypti, also all the small flowering plants that grow in the Gippsland forests. Down in the gullies can be seen numbers of tree ferns, wild passion flowers, and other creepers. On the side of the hills we see golden, black and silver wattles, and here and there patches of wild hop. As we get further up into the mountains the trees are larger and loftier. It is wonderful what a lot of different kinds of trees grow here. There is white and blue gum, ironbark, box, stringy bark and mountain ash, and a few yellow box and apple trees. There is no red gum; it grows only on the level country; the ground is covered in places with wild flowering plants. It should be a good place for honey but up to the present time there are no beekeepers here. It is a grand sight to look around from a high hill—thousands of hills can be seen, and away to the South East nearly all the lakes and rivers.

The track from Stockdale is taken over the range that divides the Avon and Mitchell rivers, and is about 16 feet wide. Sometimes we are on the top of the divide, at other times away down on the side. It is hundreds of feet to the bottom of some of the gorges. If anyone took bees up here they would have to be satisfied with a steep slope to settle on, for I am doubtful if they could find half an acre of level ground in ten miles. Bees would need to be put on the N. E. slope or they would get very little sun in the winter months. Once we start in the mountains we find them much alike until we reach Dargo. It is a small township on the river; the land is good, and hops, maize, and potatoes are grown. Some bees are kept around here, and while the honey yield failed for three years running down on the flat country, the bees in these high places did very well. The cost of taking it down is a big handicap on the beekeeper here, but if there was a good market in the old country for our honey there would be room here for hundreds. The way the markets are at present people won't spend a lot of money building up an apiary with the chance of having the honey left on their hands.

HOW TO SECURE WORKER COMB.

G. M. DOOLITTLE. (Continued.)

So, if I can conveniently, I give them a comb containing mostly honey and a little brood (if they have such a comb it is left with them, which is more often the case than otherwise) from some other colony, when they are ready to work the same as before. In this way a colony can be kept building worker comb all summer, or till they are nearly used up from old age, the colony becoming so small as to be unable to build comb to any advantage, under any circumstances. But if just the right amount of brood is left, or given them, so that they stay in about the same condition, they will build worker comb all summer by the apiarist

supplying honey or feed when none is coming from the fields. If not so strong but that I think they will still continue to build worker comb, instead of taking the brood away I spread the frames of combs (now built) apart, and insert one or more empty frames between, when these will generally be filled with worker comb before enough young bees hatch for them to change the size of cell. But *this* is always to be kept in mind, whenever you find them building drone comb: The combs they then have, all except the one mostly filled with honey, are to be taken away so that they may feel their need of worker brood again, when they will build cells of the worker size once more. I have had hundreds of frames built full of worker comb in this way, hundreds completed, as our questioner proposes to do, and hundreds "patched," where I had cut out small pieces of drone comb, which had gotten in in one way or another. If any one wishes a mutilated comb to be fixed so it will be surprise to him just give it to one of these little colonies and see what nice work they can do at "patching" with *all* worker comb.

THE LESSER WAX-MOTH.

(*Achroea grisella*.)

BY RICHARD HELMS, IN THE *Journal of the Bureau of Agriculture, W. A.*

Quite recently a new plague was brought under my notice which specially interests beekeepers. One of the wax-moths is alluded to. It may not be superfluous to mention that two species of moths, or, more correctly speaking, their larvæ, attack and devour the honeycomb. The one named scientifically *Galleria mellonella* is colloqually known as "the" wax-moth, and the other, *Achroea grisella* is called the "lesser" wax-moth. The last named is the one met with in West Australia. Although this is the first time the insect is officially recorded, it may be quite possible that its introduction dates back some time. Nor is the possibility excluded that *Galleria*

mellonella may also be found in the colony. Both moths frequently have been met with in the same apiary, and as both are equally common, the larger wax-moth may also have been brought here already. The larvæ of both moths are great enemies to bees and may become very destructive. At times the swarms yield to the aggressors and seek a new home. If they do not abandon their home they may ultimately be entirely destroyed—a danger weak swarms are particularly exposed to. The aggression of the pest is not a direct one against the bees or their larvæ, but an indirect one through the destruction of the comb. They perforate the same with burrows, and thereby destroy the cells, and sometimes cover it with a labyrinthian network of silken threads which they abundantly exude. Both the destruction of the cells as well as the impediments caused by the network are the means of killing the larvæ. The network partly smothers the larvæ and is liable to cause their starvation, as the adult bees are greatly hampered by the threads in feeding them.

The lesser wax-moth is not quite so destructive as the other, because its larvæ being smaller, eat less than those of the larger, and also because they do not spin quite so profusely. Their webs generally form clusters at and near the bottom of the combs or frames of accumulated quantities of fecal matter and debris caught in the tenacious meshes.

The adult of *Achroea grisella* is a uniformly coloured drab-grey moth with a yellow head. The larvæ are whitish with a brown head. On completion of pending observations a full account of the life history of this insect will appear.

PREVENTION AND REMEDIES OF THEIR ATTACK.

A good hive with a strong colony are the best preventatives against the aggression of these pests. A self domiciled colony in a tree is rarely attacked by the moths, or, at least, they cannot gain a footing since there is only one opening for ingress which the bees can success-

fully defend. I have never heard of the nests of wild bees to contain moths. This proves that in a faulty hive the bees cannot cope with the aggression as it may take place from several quarters at the same time, and it follows that a properly constructed hive is the best safeguard.

Hives should be made of timber sufficiently thick to obviate splitting, and the boxes should fit closely to the bottom-board, which must be solid, to prevent warping, and without joints or rents. The flight-hole should be always kept as narrow as it possibly may without inconveniencing the bees.

When moths have made their appearance a vigorous and persistent destruction must be initiated in order to assist the bees in clearing the hive of them. The moth lays its eggs near the lower end of the combs, or on the bottom of the hive and the young larvæ frequently shelter in the felted mass of web. The webs therefore must be gathered, and the debris swept off the bottoms, and burned. The larvæ pupate in preference against something solid and frequently may be found in the corners or some cracks of the hive enclosed in a cocoon. These cocoons must also be looked for and destroyed.

Wherever frames are employed it is advisable to take these out of the hive and, after the bees have been brushed off, tap them lightly with a short stick over a sheet of brown paper. The larvæ of the moth will leave the galleries as soon as the frame is tapped, and drop on the paper, where they may be readily destroyed.

Although the tapping of the frames may be somewhat sharp, it should never be done roughly, as a clumsy treatment is liable to injure the young of the bees and cause the production of a brood of cripples. These would be worse than useless to the colony, because crippled bees are unable to gather and must feed.

The new American tariff has added 10 cents more per gallon, on imported honey, making it now 20 cents.

CORRESPONDENCE.

Mr. H. R. Jervis says :—I have sold some tons of honey the last few years, and up to the present have averaged 4½d per lb

M. C. Y., Coraki, April 15th 1897 :—The season with me has been a good one, and the bees are still storing honey from the Ti-tree.

W. P. Marrar, 22nd April :—This is a very bad time we are having through the effects of the drought, and a gloomy prospect for all stock this winter. Bees have been doing very little for some time.

Mr. T. Bolton, Dunkeld Vic. writes :—We are doing nothing this autumn owing to drought. Red gum was a failure at its end through cold and wet in January, followed later by dry cold weather so we got no autumn crop thus far. I hear the box up north is yielding but we have none here abouts.

Mr. F. W. Penberthy, writes :—The weather is very dry up here and if it rains I think it would be too late as the frost would set in soon after; if it is a severe winter stock will die by thousands. My bees are all broodless and have been for a fortnight although the weather is very warm. White box is in bloom but very little honey in it; a little white gum in bud but late.

J. J., Berwick, Victoria, writes :—Would you kindly send me the following answer on a post card as to how much salt should I put to a gallon of syrup to feed to the bees. Please answer quickly as the weather has been so cold and wet here and it is necessary to feed them and I want to try salt in the feed. The season here has been fairly good, for this part of Gippsland district averages about 100lbs per hive. If I have time I will send you a little bee news for the next B.B.—a little experience of the past season which may be interesting to some of our readers.

We have not tried, but should think a table spoonful to one gallon should be ample.

R. K. H., Athelstone, Murrumbidgee, May 6th 1897 :—There is little bee news from here just now. I have had over

600 lbs from four hives, and others have done as well and better. There is a little honey coming in still, so the bees will have good supplies for winter. I have put up a small shelter to break the West and South winds for my bees, and I think they will start all the earlier in the spring for this little piece of attention. The white box, which grows somewhat sparsely in this district, is now giving a little honey.

W. V. W., Yass, April 30th 1897 :—I hereby give you notice that I wish to discontinue my subscription to your *Bee Bulletin*, so kindly close my account when my twelve months is up, I think it is up in June 97 (this year). I am not leaving off my subscription on account of the paper, because I am well pleased with it, but on account of drought. Have lost all my bees and am selling out my boxes, etc., nothing but bad seasons all the time. Should things improve in the future I will no doubt drop you a line and continue my paper.

J. M., South Grafton, May 3rd 1897 :—Mr. Editor, you asked me to send you some bee news. It has been very dry of late, and very little blossom of any kind except the white box and it did not last long. The spotted gum and grey gum are out in bud, but I think it will come too late to cause much of a flow. My bees worked all last winter on grey gum and stored some nice honey. My bees do very well in the summer, but in the fall I lose very heavy, sometimes with that horrid disease paralysis. Sulphur is the only thing that will stop it. They are doing well at present and plenty of drones flying. Your little paper has taught me all I know and I am always looking forward to its coming; wishing it every success.

W. A. Wamban, April 26th :—I have sold my honey in bulk, and shall not require any labels this season, but you can forward me the *Bulletin* for I have just made a start in beekeeping and consider it a boon to every beekeeper and more especially the beginner. I used to get it from Mr O'Connell when I first

started but I have 40 hives now and I consider I have a nice little apiary. Now will you kindly tell me which is the best way to fix them down for the winter. This is not a very cold place and I don't know whether to put the brood in the top story or take the top story off altogether though some of my hives are very strong with bees. I would have a difficult job to get them all below. I enclose stamp for reply as it is too late for this month's Bulletin.

J. G. V., Manilla, April 22nd 1897 :— My bees are still busy bringing home honey from white box ; the wonder is how they can get it this dry weather. We have had no rain for over ten weeks now, everything looks dried up and perished. There is something troubling my bees, I imagine it is what they call paralysis. It first attacked them last winter but as spring and summer come they seemed to recover. But I can see that some of them are still in trouble ; some I have dosed them with salt and carbolic acid in the spring, but I don't know that it did them any good. I have put sulphur on the bottom boards. Could you suggest a remedy.

We had one case this year in a hive that was bad with it last year. Sulphur and salt did no good, so we put them in a new hive, and gave a new queen and they are alright now.

J. G. C., Douglas Flat :—Just a few lines to say that we are still alive and in the midst of some sort of weather, that is neither summer or winter, but an intermixture of both. We have had a good honey flow this summer considering the long spell of dry weather, the driest that has been known for years. Bees have been cutting some rum capers this season, as nearly half my colonies have been queenless at times. When ever a queen happened to get above the excluder she was certain to be killed when put down again. I have noticed it so in every instance this summer, while I have had several drone laying queens which means a lot of work in rearing queens, and I find my neighbours are enjoying blessings similar to myself. There is a lot of much honey coming in this last

month as the weather is cold and dull, and blossoms are falling off very fast.

A. F., Darkes Forest :— As for bee news there is nothing but bad these two years from this district. Last season there was not a swarm seen, and my stocks came down to three, and in fact I had to buy bees to keep a valuable queen alive in the spring. This season there was a little came in in spring, and I managed to increase to ten. What little surplus there was, was like Mr. Abram's, I could throw out the comb, wires and all I think before the honey would come, and it has been so dry since that what few trees did blossom yielded no honey. It has not been so dry this ten or twelve years as it is now and not much signs of a change yet. I have had a sample lately of Mr. Helms abnormal bees, mentioned in your last issue. For the last month or more one hive has been doing nothing but fuss with a host of glossy half silly looking bees. They are blue black on the head and shoulders ; the yellow bands seem to have gone all into one, and behind, the same glossy black as the head. The bees are all the time pulling and rolling them about and now and again they will carry one away alive. How this hive could have got over-heated any more than those along side of it I can't see. I should like to know how to treat the seed of the white thorn previous to planting, perhaps some of your readers might oblige.

G. W. V. H., Rawden Island, May 3rd 1897 :—I sold my honey now. It was so dull in Sydney and mine was not sold for about six weeks. I got 2½d for it. My bees are not doing much now, but in the first of the season I took 74 lbs from an Italian hive, and have extracted twice since. I began the season with only six hives and four of those were only on starters, and I have now 17. I am very pleased to say that I obtained first prize for comb honey at the local show, although I was defeated in extracted honey. I find that one Italian hive is better than four Black for gathering

honey, although the hybrid come near the Italians for honey. I have one or two very lazy Blacks (not aborigines) I was feeding last year and I suppose they think that if they don't gather honey I will feed them this winter, but their disappointment will be great. Do you think it does any harm to give the cappings to the bees to clean the honey from, putting the cappings in the middle of the yard. I would also like to know if I could Italianise (I have only one pure hive), by killing all black queens and placing a frame from pure hive in the hive from which I killed the queen, and following year killing queens raised from these frames (leaving the drones of those queens) and taking frames from pure hive again; would I be rearing too closely. Thanking you in anticipation.

The giving the cappings to bees in yard would very likely lead to robbing. Would prefer to get several Italian laying queens instead of one, thus doing it quicker, and preventing too close breeding.

A.W.L., Balmoral, Southern Line:—Mr. B—— of Gettysburg near Liverpool, told me he was going to send you on some of the birds (swift) that have been eating his bees. Well he sent me on a couple and I was perfectly astonished, for when I cut open their gizzard, I found what could have been no less than a couple of dozen bees in each. If two birds destroyed so many bees, it certainly would not take long for thousands of swifts day after day to eat out an apiary. Have you heard, I wonder, of any other beekeeper being troubled as Mr. B—— has been? Certainly I have seen in your valuable paper accounts of a few swifts being about several apiaries, but not such a number as Mr. B—— complains of.

We have ourselves shot both them and the blue martin lately, having blamed them for the loss of virgin queens when mating. After one or two are shot they clear away scared, but you have to be on the watch for them.

J. K., Sydney, 6th March:—My bees did very well during the past spring, storing several crates of comb honey of excellent quality for their owner besides

plenty for their own domestic requirements. The man must have a hard heart that can rob them of all their stores at the approach of winter leaving the little toilers to silently starve. Your type-setter made a mistake on page 304 of the *Bulletin* for March. Refer to J. K. re Spider Plant. He prints "*Motherwort* as *Motherwork* and *Figwort* as *Figurst*. The foregoing errors place your correspondent at a disadvantage, as readers of the *Bulletin* would in all probability attribute the errors noted to the ignorance of the individual who tendered the information and not to a typographical error on the part of the printer. Kindly correct in next issue of the *Bulletin*. There is one scrub that I wish to introduce to the attention of all beekeepers or to any person with soil enough to grow even but one tree. Its name is *Tecoma* (*Velutina*) I offer the second name to distinguish it from others of same family, some of which are climbers. The above is a most ornamental tree or scrub bearing great quantities of lovely yellow flowers which grow in large bunches. It commences to bloom in early Spring and continues to flower throughout the Summer. The formation of the flower is similar to that of the Foxglove, (*digitalis*) so that the nectar which the *Tecoma* secretes largely is not washed out by heavy rains. It yields honey every year and almost from spring until winter. It does not exhaust itself by yielding large quantities of seed for it only forms a little, but the little grows easily. To sum up it would grace the small enclosure of the humblest cottage or the grounds of the most pretentious mansion. Beekeepers, plant one and you will plant more.

J. S., Port Elizabeth, Cape of Good Hope:—My dear Mr. Tipper, just a line. Have just received a letter from Cape Town from a representative of a new South Wales Bee Supply house. It is certainly a step in the right direction, and I wish him success although at the present time there is an unsettled feeling at this time on account of the impending crisis or probability

of an outbreak in the Transvaal which unsettles the general business throughout South Africa. What with the Rinderpest, the Transvaal, and our present Border War, business is very quiet. I think England sees now it is about time to settle the matter for the peace of Africa in general, although I would be very sorry to see a war. The Dutch are preparing for the final struggle, which will mean the loss of Transvaal and thousands of lives, and then all business channels will be opened up throughout Africa, and when the Hon. C. Rhodes has opened up Matabele-land by rail, then Africa will be one of the most prosperous countries in the World, and benefit the World at large. So you see how the business relations stand for the present. There will be a fine opening for Australian commodities in Africa when the country is settled. I hope Mr. ——— will push the bee and hive business in South Africa, as his prices are cheap and bee material of the best; and a few lectures on beekeeping also judicious advertising in English and Dutch. I do not see why he will not do well in that line. I would have long ago entered fully into that business, but was not strong enough in cash to go into it properly, for by myself a good business could have been established at that time, so I had to content myself with colonial make. But owing to the high price of wood and labour I had to jog on the best way I could, and as I knew no one in Australia I wrote to America through a firm trading there and got a small shipment from them, which I soon sold out and sent for a large shipment, but I hope to do some business with Australia in the near future. The honey season has been very poor this time, but I hope this Transvaal business will soon be settled, and the Rinderpest stamped out, and business opened up again throughout the country.

CAPPINGS.

From American and other Bee Journals.

It may not be generally known that the eucalyptus tree derives its name from the peculiarity of the flower bud, *eu*, good; *calypto*, to cover.

A Mr. W. G. Hewes, suggests that Congress place an internal duty on glucose of two to three cents a pound.

H. R. Rhodes, adds a gallon of honey to a barrel of 2-3rd full of hams under brine; in six weeks takes them out and smokes. He says they are then sublime.

Mr. Julius Hoffman, the originator of the Hoffman frame, went into last winter with 800 colonies, which in February were doing excellently.

Don't melt wax too many times. It gets darker each time; and don't pour into moulds until cooled, so it would run nicely. Wet the mould, not grease it.

L. A. Aspinall says the mating of queens may be controlled by clipping the queen's wings. He clips both wings 1-16th to 1-18th of an inch, care being taken to clip the same amount from each wing, so that the queen's balancing power may not be lost. Less than half as many proved to be mismated, compared with an equal number not clipped.

The A. I. Root Co. are making a deep cell foundation for comb honey with side walls $\frac{3}{8}$ to $\frac{1}{2}$ inch thick enabling the bees to start to work in it immediately. W. J. Hutchinson objects to the eating qualities of such comb honey. Mr Root replies that there is no more wax in such foundation, but it is better placed in the walls than in the base or septum. Mr. M. Baldrige gives a lengthy article in the *Beekeeper's Review* on drawn combs in brood chambers for sections, as answering the same purpose.

Mr. F. C. Harrison B. S. A., Bacteriologist at the Ontario Agricultural College isolated Foul Brood bacilli, and placed them in darkened chambers, at temperatures from 45° to 90° and at the end of a month growth was still going on. The same results were found when they were placed in the light. He took one drop of the spores and put it in a test-

tube and allowed it to evaporate; he then exposed it to the sunlight for a portion of 124 hours, at 85° to 90°. At the end of the period he found them still alive. He found that it took 45 minutes to kill them at temperature of 208° to 210°. By using steam it was done in 10 minutes. In dry heat they live 1½ hours at 150° centigrade. He found bacilli in honey and bee-bread. Formic acid retards the growth of the bacilli, but not of the spores, but does not kill them. The bacillus was the vegetable form, while spores are found when the bacillus ends its existence. Spores are a form of reproduction to tide the bacilli over adverse circumstances. When bacilli are excluded from oxygen they are purer. In hydrogen the germs well. He found bacilli alive in comb that had been exposed to the atmosphere for eight months. He had tried feeding bees with honey in which spores had been placed. At the end of one month none seemed affected; but flies fed on sugar and water in which spores had been placed all died. He was now conducting experiments with formic acid and naphthalene, feeding the former to bees to see if that will counteract foul brood.

F. A. in Snell, *A. B. J.* says:—For general purposes I reserve brood-frames filled with honey to supply any colonies deficient in honey, and prefer it to any other plan. The beginner should not strive to more than double his colonies any year. Try to keep all strong. Feeding for winter, except in extremely poor seasons, will not then be needed. It does not pay to extract all honey and feed back syrup for winter food. I prefer hives or brood-chambers large enough to hold honey enough to last until Spring. I have tried small ones to my heart's content.

A prehistoric bee-hive, found by workmen engaged in a stone quarry one mile south of the city of Atchison, Kansas. In quarrying a large rock in one of the cliffs, a hole fifteen feet in diameter had been drilled with a steam drill, into which explosives were tamped and fuse attached. After this there was a great

blast and a great upheaval of rocks. When the workmen went to ascertain the results of the blast, they discovered a great cavity in the rock that they think had been many years a great bee-hive. There were no bees, but plenty of honey, as the rock had been many hundred feet below the surface of the earth. That the honey was palatable, is vouched for by all of the workmen, but the debatable question—is that the product of bees of this age or prehistoric?

John M'Arthur, *A. B. J.* says:—There is one peculiarity about the yellow sweet clover that I have not seen noted by any one, and that is, the seed-pod—examine it, and you will find it contains from one to three seeds, differing entirely from the white in this respect, which carries only a single seed in each pod. Its stems are of a reddish nature, while the white are greenish. In very dry seasons it often refuses to bloom a second time, while the white never fails, and is the last flower to be seen in bloom that bees work on.

PREVENTING BEES FROM LEAVING A NEW HIVE.—L. L. Skaggs, says:—Just put an entrance guard over the entrance and leave it there until they are satisfied with their new home. The bees may come out several times, but they will return, because the queen can't follow. I have been practicing this for four years, and I find it beats giving a frame of brood, or any plan that I ever saw in print. If you want comb honey, give the new swarm four frames of sealed honey and four frames of starters, and see how quick they will go to work in the sections, and the starters will be built out with worker-comb, as a rule.

Mr. Frank Coverdale, said at the Iowa Convention:—I harvested my first crop of Alsike in 1892, cut it for seed as soon as ripe enough, and it yielded, from 8 acres, 32 bushels of nice, clean seed (which I sold for 10 dollars per bushel), and as nearly as I could tell, about one ton per acre of very good cattle hay, which was 8 tons, worth 5 dollars per

ton, or 40 dollars, to which add 320 dollars, and we have 360 dollars. Take off 32 dollars for hulling, and we have a net income of 328 dollars, which is 41 dollars per acre—a better income than I ever obtained from any other crop on the farm. Alsike will yield at least three bushels of seed per acre, and I have obtained (the 4 years that I have grown it) an average of 6 dollars 75 cents per bushel for the seed; 75 cents off for hulling, leaves 6 dollars clear. The value of one ton of good hay per acre is 5 dollars, making a net income of 23 dollars per acre, saying nothing about labour of harvesting and threshing.

Last year 50,000,000lbs honey was produced in the United States.

S. M. Seeley in *A. B. Journal* says:—I also consider sweet clover a good fertilizer and I have not yet found its equal if properly applied. I would recommend this procedure. After cultivating your corn the last time, sow two or more acres at the rate of one measured bushel of seed per acre. It is best sown in the hull, as it loses its germinating qualities sooner if hulled. The ground being shaded, it will not make a very large growth until you cut the corn, which should be done as early as possible; then it will shoot up and cover the ground, and make a good fall feed as pasture. The next year leave as many acres as will furnish you with seed for the next two or three years, and trash it with a flail as soon as possible after cutting. The remaining part of the field should stand till necessary to plant corn, then turn it under with a plough. If you wish to obtain honey from it let it stand till it ripens. By this plan you may enrich your farm in a few years, and not have a weed to contend with. Four years ago I sowed four acres for hog-pasture; a portion of this was bottomland, and well soddled with yellow dock. To-day there is no dock to be seen; in short, I believe sweet clover will take out any weed that grows. It is very easily exterminated, either by cutting or plowing under before the seed gets ripe.

It is not advisable to feed syrup during mid-winter. Better give them a mixture of powdered sugar and honey kneaded into a stiff dough.

G. W. Demaree, says:—Too large comb space for the queen will diminish the honey crop, and too limited a space will damage the colony.

Careful experiments in France show that the heat of the brood cluster was conserved quite as much by having brood combs left in place as by using close division boards.

Woodpecker says he has cured paralysis by killing the queen, and allowing them to raise another from the egg. Don't put in a cell or another queen, but let the brood get all out of the way before another queen gets to laying.

The amount of capital invested in the bee business, in California exclusive of land, is 450,000 dollars. The people engaged in the business spend something like 75,000 dollars for supplies, and about 70,000 dollars for labour.

The *A. B. Journal*, says:—Quilts are not used to the same extent as formerly, many having cast them aside entirely after using them extensively. A flat board, directly over the hive or over the supers is now the general rule.

The A. I. Root Co. are now making frames with wire staples under the end of the top bar, to avoid the bees propolis between the end bar and the rabbets. The distance between the two end bars is shortened slightly to allow for same.

Mr. Danzenbecker uses parafine paper on the sections. He says it not only conserves the heat, but also does away with propolis daubing on the sections. Last year he had no need to scrape any sections through using this parafine paper, yet won the first prize for comb honey at the Michigan State Fair.

HONEY-COOKIES.—One learge teacup full of honey. One egg broken into the cup the honey was measured in, then two large spoonfuls sour milk, and fill the cup with butter or good beef tipping. Put in one teaspoonful of salt and flour to

make a soft dough. Bake in a moderate oven a light brown.

HONEY-AND-TAR COUGH-CURE—Put into boiling water a shallow tin dish containing a tablespoonful of tar. When the tar is hot, add a pint of extracted honey, and stir well for half an hour, adding to it a level teaspoonful of pulverized borax. Keep in a bottle well corked. Dose: a teaspoonful every one, two or three hours, according to severity of cough.

HONEY-CANDY:—One quart honey, one small teacup of granulated sugar, butter size of an egg, two tablespoons strong vinegar. Boil until it will harden when dropped into cold water, then stir in one small teaspoonful of baking soda. Pour into buttered plates to cool. Without the vinegar and soda it can be pulled or worked a long time, and it is just the thing for an old-fashioned candy pull, as it is not sticky, and yet is soft enough to pull nicely.

Gleanings says:—How does it happen a bee can eat honey for months without becoming overloaded? In winter it eats perhaps three times its own weight without a fly. Well, 99 per cent of honey is oxygen, hydrogen, and carbon; and when that's consumed it turns into vapor of water and carbonic acid gas, neither of which remains in the intestines. In that light the only wonder is that they become so bloated as often as they do.

THE USE OF BURR COMB.—*Gleanings* says:—Bees usually gnaw the cappings of sections for several reasons. 1. Because they are scared when they are disturbed, and proceed to get a load of honey from the first that comes to the touch. At such times they will cut the cappings when there is plenty of unsealed honey within half an inch of them. They seem dazed, or get reckless. I have seen a black swarm bite nearly all the cappings in the brood chamber during an examination, and it is expensive business too; for they never fix it up again, and a few such scraps will use up a winter supply, and unless there is a late flow they will have to be fed, as I

have found to my sorrow, sometimes, in requeening, when no honey was coming in. Another reason is that they never leave the sections and go back without as big a load as they can manage to fly with; and unless this is supplied in some other way they are obliged to bite cappings to get it; and right here is where the much-abused burr-comb does a good turn if they are filled with honey, which, being broken in removal, furnishes their load, and starts them home much sooner than they would otherwise go. I may add that, at any other time, the burr-comb is a nuisance, although bees will enter the sections sooner and work better with them between the top-bars and the super. I know one man who had Langstroth hives with light-top-bar frames which sagged half an inch or more, and that space was filled with combs which he never removed, but set the surplus receptacles directly on them with a thin board bottom between to keep the combs from being attached to the sections. He never gave the bees any other attention than to put them on at the beginning of the harvest, and remove when full; and I have never seen a whole apiary in my life that filled up as uniformly and in as good shape as that one did year after year; but bees could not be handled in that way if you ever wanted to know anything about their downstairs condition, for they were as immovable as a box hive, but much better for honey production. (Now, that chip must be twice as large as the whole block.) If that big cave had been located here for the last two years there would be neither tons of honey in it nor even pounds; and how do those fellows know about the amount of honey, any way, as they say it can't be seen or got at.

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

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

A postal note received from Gundagai but the name of sender not signed. Will he please communicate so that we can give him credit for his subscription (5/-).

A REMEDY FOR FOUL BROOD.

C. DAVENPORT IN *America Bee Journal*.

I believe that I have discovered a method by which this disease may be cured with much less work and expense; the frames and combs, as well as the hives, are saved, and any honey that may be in the infected combs is saved, and does not have to be extracted or removed from the combs. The healthy brood can also be saved without much work. Three years ago last summer I conducted a great many experiments with different kinds of drugs, trying to find a better method of killing moths in comb honey than by the use of sulphur. I was unsuccessful in this, for the fumes from any drug I tried, that would kill the moths also injured the flavour of the honey. In these experiments I found that the fumes from bi-sulphide of carbon were very penetrating; they would go right through and through a comb of honey. This fume, or gas, is also deadly poisonous. But it all evaporates from the honey after it has been exposed to the air for some time. Honey treated by this method, though, seems to become thinner, and the flavour is injured, but it is all right for the use of the bees, and the combs are not injured any, no matter how long they are subjected to the fumes. I decided that these fumes were strong enough to kill the germs of Foul Brood or any other disease. I did not have, nor never have had, any Foul Brood among my bees but I thought if it ever did appear I would give the matter a trial.

The next summer, however (which was two years ago), I resolved to send for some samples of Foul Brood and after a good deal of correspondence over the matter, I received three samples by express. Two of them were not Foul Brood although they greatly resembled it; the third was genuine foul brood, in an advanced stage of rottenness; it was a piece of comb about 6 or 7 inches square, containing some honey, and about 1/2 of the cells contained dead brood in different stages. This was treated to the fumes of

bi-sulphide of carbon over night or about 10 hours. A colony was isolated from the rest, and the piece of foul brood laid on top of the brood-frames near the centre of the hive; the cover was placed on, and pressed down, which mashed it so that it ran down over the combs, brood and bees. The front of the hive was raised so that none of it would escape. No signs of the disease have appeared in that colony as yet.

Now, if the bacilli and spores of foul brood can be killed by this means (and in my mind there is not a doubt but what they can), a tank could be made large enough so that several hives could be treated at once, if there were many colonies affected. Only a few extra hives with frames would be necessary, for the infected hives and combs could, after treatment be used for the second change. Combs containing healthy brood could be tiered up on one or two hives, and these then treated after the brood had hatched. No frames, combs or hives would be injured in the least by this method. While frames are not very expensive, their cost with the freight, work of nailing them together, and a sheet of foundation for each one, would make quite an item if many colonies were affected.

I think all will see the great advantage this method would possess over destroying the frames and boiling the hives, for it would not be nearly as much work to disinfect them as it would to nail new ones together, to say nothing about their cost. The cost of the bi-sulphide of carbon would be but a trifle.

PLANTS—HONEY.

WHY DO PLANTS YIELD HONEY SOMETIMES AND SOMETIMES NOT.

Woodpecker in Gleanings.

Well, it is a disputed point, some thinking it wants lots of electricity; but the poorest seasons, and the most of them, with me, have been just that kind of weather. Then others say, dry and warm. Well, that is better for a little while, but it's sure to cut the flow off by killing the plants if it is very dry; besides, in my opinion, drouth is very nearly always at the bottom of the whole thing of honey failure. In an

experience of 37 years with bees I have never had a good yield of honey in a season that followed a very dry spell the year before; and I never had a failure the next year after a wet summer, no matter what the next year was—hot or cool, wet or dry. Do you see the point? Some do, and some don't. Well, it is this: If plants can have sufficient moisture all through one season they will prepare for a good yield the next year, and will give it unless something kills them next year or they get winter-killed. I have never seen it fail.

As to the theory of the condition of the atmosphere at the time of blooming, I don't believe it makes much difference. Indeed, the best yields of honey I ever got were in some of the very worst atmospheric conditions possible. I once had one week of great yield when it was so cold and dry that it killed the clover in a week, and killed all the field bees to get the honey too. The sunshine was very bright every day; But a cold northeast wind blew right off Lake Erie. The clover belt was about a mile from the lake, and about two miles from the apiary (every thing nearer and on higher and dryer land dried up without coming to bloom at all); and the bees were obliged to face that chilling wind to get there, and at the end of one week there was no workers left, all having perished except the younger ones not old enough to work outside. The clover also perished about the same time; but in that week the best hive filled 50 1-lb. sections, and made a winter supply, and the weaker ones got heavy for winter. Trees are not so much affected as plants, as they form their buds and get ready for next year during the month of June, especially basswood, the buds of which are full grown and all wood growth done usually by the middle of the month; and although the latter part of the season may be very dry, it does not make much if any difference with plants like buckwheat that grow and bloom all the same year. I think the same conditions prevail, as I never knew it to yield much honey unless it could have moisture to make a good thrifty growth up to the blooming period; but if stunted, and short of water when it was going up to bloom there was little or no honey, no matter how favourable the weather was during bloom. I have had four good crops of honey in succession, every season of which had had lots of rain; then that was followed by six years of drouth, and not one of these gave any more than enough to winter the bees; and since I have been here we have had three dry seasons followed by no honey the next year, and two wet ones followed by good yields the next year. This past summer was fairly wet, and I expect honey next year any way, whether wet or dry, unless it should be so dry that clover can not grow at all, as it was two years ago.

QUESTIONS.

110.—In the case of a heavy winter flow, do bees die off from continued work, leaving the hive weak in spring, or do the queens continue laying all the winter?

T. O'GRADY.

111.—Would new oil drums waxed inside, be an expensive package for honey.

W. S. PENDER.

110.—Queen lays during flow and keeps up strength of colony.

GIPPSLANDER.

109.—Don't consider them an advantage.

109.—Honey can be kept from candying for a long time, if it is warmed before it is soldered up.

A. J. PANKHURST.

110.—From my experience the queen continues laying all the winter in a good honey flow, which keeps the colony strong for the spring; and you will have early swarms instead of weak colonies.

111.—I should think that oil drums would be very expensive for packing honey, as they cost me about three times as much as ordinary tins.

AUSTRALIAN YANKEE.

110.—I have never had a winter flow, but would suppose that the queen would keep the hive supplied with brood the same as at any other time, when honey was coming in freely.

111.—Don't have any truck with oil drums, they are bad property where honey is concerned. If you have put your honey in such packages, you will soon get a bad name as a honey producer.

J. LE. M. SCHOMBERG.

109.—Yes, without the slightest. Certain grades of honey can be marketed without granulation, as far as I have experienced. I have had honey five and six years, without any sign of granulation, and have had it put in a freezing apparatus for a week to produce granulated honey for a purpose, and to my great surprise came out in a perfect liquid form. I think this is test enough, but is known to but very few beekeepers.

110.—Bees will die off from constant work winter or summer, but instinct learns them to breed up according to decrease, and in case of a good flow of honey for winter there is very little chance of spring dwindling.

111.—Oil drums or any other iron vessel is very detrimental to honey and spoils the flavour.

JOHN SMITH, QUEENSLAND.

110.—If there is a heavy honey flow all winter, the queen will keep on laying, and the hives will keep strong. Such is our experience. At present the ti-tree is in full bloom, and the bees very busy. When there is no honey coming in

during the winter, then the queen ceases laying or nearly so, and colonies become weak.

111.—Should think oil drums too expensive. Taking everything into consideration we think new 60lb square tins the most economical and in the end the cheapest package. Have tried kerosene tins, but had to give them up. They were the cheapest package at first, but in the end we found them the dearest.

HUGH RUSSELL, VICTORIA.

108.—Used one only, and did not like it. My plan is to use a piece of zinc (out of packing cases), about 18 inches long, and wide enough to cover the centre or brood frames. This gives the bees room to come up all round, keeps the queen down stairs to a great extent, but not entirely, and ensures all but the outside frames from being glued to the top bars of those below them.

109.—I know of no way of preventing honey from granulating, with any degree of success. Heating it and canning it up air-tight while hot will keep it liquid much longer than it would otherwise remain so. I find yellow box and red gum honey will remain liquid very much longer than honey from the grey or black box, which will candy within a few weeks of extracting.

T. BOLTON.

108.—I use mine more frequently for shade than for their true purpose inside the hive.

110.—Some loss of bees, but as much from wet and cold overtaking them, I think, as from actual work. There may in spite of this, be an increase of strength in some colonies from brood rearing. I have just moved one of my apiaries 20 miles to a bloom, and it has resulted in a start in brood rearing after some months of scarcity.

111.—Wasteful of space, heavy, and too heavy when full for much handling. If waxed inside and you have occasion to liquify contents, with heat, you will undo and lose the waxing and have to strain the honey.

QUESTION NEXT MONTH.

GIPPSLANDER.

112.—Have you experimented with the long idea hive through the past season, and how do you like it? Is it an advantage over the other system?

EVERTON.

113.—Which is best for bees; to contract entrances to hives during winter and other cold days, or leave the full entrance open? I see Roots *A. B. C.* speaks in favor of full size entrances.

On page 14, April number, sixth line from bottom should read, "three 60lb tins," not "three tons."

CRUMBS.

AUSTRALIAN YANKEE.

HONEY DEW.

All through this Fall the bush trees around here have been dripping with honey dew, and yet I have not seen a bee go near it. What is the cause! other years the bees would swarm around it, this year it is about to crystalize on the trees "real candied honey," and can't understand it. Can any of the Brethren enlighten me.

THE CONVENTION.

I am glad to learn that our energetic secretary has not resigned, and that there is hopes of a convention. I want to be present if possible. I think if the subscription to the A. N. B. K. A. was lowered to 2s. 6d., that there would be a much longer member's roll; what do you say Mr. Editor. 5s. don't look much, but there are so many five shillings to pay away in the year, we have to look at them before giving them away.

DO WE NEED TO EXPORT HONEY.

I very much doubt it. I think we could better employ our time developing our home trade. I have been knocking around some this autumn. I have visited many towns, and in all my travels I did not find one grocery store supplied with extracted honey put up in small tins by the Apiarist. Some of them had honey in 2 and 4 lb tins, put up by a city packing house, but it was such poor stuff, that people would not buy a second tin, and I don't wonder if it was all like what I tasted. It tasted to me like three parts glucose. If any of the rubbish is brought into my town I shall certainly have a sample analysed and see what can be done in the matter. Why don't Beekeepers put their honey up in small tins, and supply their grocery stores; they would sell much more honey, and people would get accustomed to eating it the same as they do jam now. I have sold nearly all my crop now, and will have to buy tons of honey to keep my customers going until new honey comes in again; and as I said in a former "Crumb," a few years ago before I started to put it

up in small tins, I could not sell a dozen 60lb tins in 12 months; this summer and autumn I have sold tons. Draw your own conclusions, Brethren. Don't ask exorbitant prices, as we have to compete with jam and treacle. It is very little extra trouble to put it in 2 and 4 lb tins than it is into 60 lb tins.

J. E. W., Moruya, 13th May.—Am very glad to tell you the A.B.B. reaches me with unfailing regularity, I should miss it very much if it went astray. As I have had a little varied experience since I last wrote, perhaps it may be of interest. The commencement of the season found me with a very small swarm of hybrids, apparently clean, and the remnant of a colony of Italians left me by the Foul brood. To try and save the Italian queen, I destroyed the hybrid and put the other in her place; she did splendidly for 5 or 6 weeks and was building up well, when Foul Brood again showed badly. I tried Phenyle but before I had time to tell how it would act, I picked up my queen outside the hive one day, dead. Having been fighting Foul Brood for the past two years, I thought I had about come to the last straw. After thinking over it awhile, it struck me I saw a way of working out the Foul Brood. I was tired of burning up comb and brood, and having to continually replace them. About $\frac{3}{4}$ ths of the brood in the hive was healthy, so I let them rear another queen; while rearing her most of the brood hatched, and just before she commenced to lay, I took all the old frames away, and gave them new frames with starters. They built up rapidly, and gave me a surplus of about 50 lbs of honey. Here is a curious thing that has come under my notice on Feb. 6th. I extracted a single frame of honey getting 2 pickle bottles and a small glass jar of beautiful honey. The two bottles were corked at once, sealed with melted wax, and placed side by side on a shelf; to-day one bottle is more than half candied, while the other is quite liquid with only a few bubbles forming. The bottles

were perfectly clean. The only difference between them was, the one that candied was nearest the weatherboards, and possibly may have got a little warmth from the afternoon sun; but I was always under the impression that heat was a preventative. We have had a splendid honey flow but very late, I only extracted my last frames on the 3rd instant, a beautiful light colored honey. There is a little honey still coming in, but the nights are very cold, and as we have had several frosts, I was afraid to leave them longer, without fixing them up for winter. A few weeks back a party, a few miles out, fell a bee tree, with plenty of honey—nearly a washtub full—quite green and stinking, and all the comb rotten with Foul Brood. As it was no use to him, it was left, just as it was, and an apiary of nearly 40 colonies a mile or two away. No wonder we can't get rid of Foul Brood, and the Act apparently as far off as ever. I am going into winter with three good colonies—swarms have been very scarce this season—and if my old enemy lets me alone, I hope to be able to recover lost ground.

FOR SALE.

FOUNDATION MILL, £3/10/-, or exchange for 4 60lb. tins of good honey; also INCUBATOR (50 egg) in good order, for 6 60lb tins of good honey.

R. H. JERVIS,
Wrekin Apiary,
MOSS VALE.

Wax made into foundation for 6d per pound.

THE ENLARGEMENT WAS FREE.

R. H. LONG.

He wanted to photo our beeyard,
He said that the charge would be small,
And a matter of half of a sovereign,
Would cover enlargement and all.
No extras, said he,
The enlargement is free.

Just then some cross bees started stinging
His face till it swelled past recall,
And he swore that 'twould take a big bank-
To cover enlargement and all, [note
No extras, said we,
Enlargement is free.

FOR HONEY LABELS, EVERY DESCRIPTION OF PRINTING

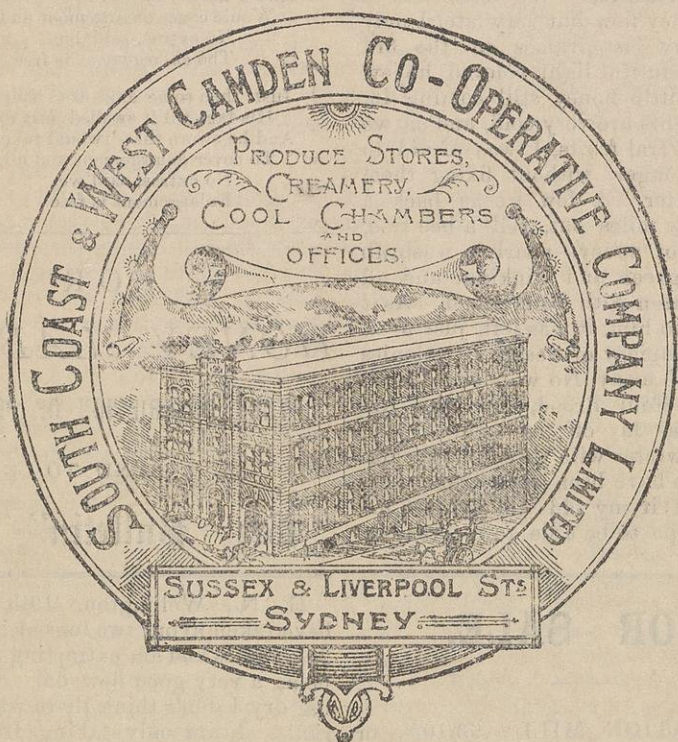
SEND TO

“Bee Bulletin” Office.

H. N., Wellington, 19th May:—I have taken about two tons of honey from 25 colonies and am extracting now, there being a very good flow on. Season being dry I don't think there will be any risk. I am only taking from supers which are full every week or ten days.

W. M., Amaroo, May 8th 1897:—I followed your kind advice and made a start in November last with one colony of pure Italians (leather coloured). I increased to five and have taken some honey during the season and have supplies to carry over the winter. It has not rained here since 10th January last, and of course the long drought has not helped the honey flow. The box began to blossom about a week ago, and the bees are busy during the warmer hours of the day. We have had several severe frosts here. With best wishes for success of A. B. B.

Honey Sales a Specialty



Produce & Live Stock Salesmen

SALES OF DAIRY PRODUCE, HONEY, &C., AT OUR
WAREHOUSE DAILY.

FARM PRODUCE BY AUCTION AT REDFERN & DARLING
HARBOR.

LIVE STOCK SALES AT CORPORATION YARDS.

EXTRAORDINARY OPPORTUNITY.

FROM THE FACTORY DIRECT TO THE CUSTOMER.

Our Company is selling *direct* to the customer, thus procuring for the latter a double economy, namely, the profit of the wholesale dealer, and the more considerable one of the retail dealer, amounting to from 5s to £10 upon a single watch. Retail watch-dealers and jewelers, usually selling but a few watches daily, are forced to make an extraordinary profit upon each one sold in order to defray their general expenses.

We manufacture as our specialty only sterling silver or gold stem-winders (keyless watches.)

The keyless mechanism of watches is one of the most important and useful inventions of modern times. Instead of fumbling in one's pocket to find the key, which when found is most always filled with dust—this of course being transferred to the watch—one has but to turn a knurled button fitted to the pendant (or ring), thus winding the watch—and regulating the hands by the same means.

Our watches are everywhere recognised to be the best in the market, surpassing all others by the precision of their movement as well as by their accuracy and cheapness.

Our factory, since its foundation in 1852, has acquired a world-wide reputation, and obtained the highest awards from all the important Exhibitions. No watch leaves our factory without having been carefully examined and verified thus being ready for immediate use. Each one is put up in an elegant silk-lined case, and accompanied by a warranty for three years.

The buyer may return any of our watches within six months should the latter not afford him the most complete satisfaction.

All articles sold are delivered post free, and custom duty paid to any part of the world, thus without the slightest trouble or formality to the receiver.

All repairs during the 3 years of guarantee are executed gratuitously, if the watches be forwarded to our London office. The following are cash prices without discount:

The following are each priced without discount:			
A. Stem-winder, sterling silver; hall marked, jewelled in 6 actions, crystal glass, a strong and durable watch	..	..	.. 20 12 0
AA. The same with double silver case—Hunter—elegantly engraved	..	..	.. 20 18 0
B. Gold stem-winder, hall marked, strong keyless action, jewelled in 13 actions, with gold or steel hands, small second dial, engraved in beautiful designs, engine turned or plain polished, with monogram, initials, arms, &c.	..	..	.. 22 0 0
BB. The same as B, with strong double gold case, an excellent and very elegant timekeeper	..	..	.. 23 19 0
C. Royal chronograph, 18 carat gold, most superior keyless movement, of the most accurate workmanship, and one of the best wear-resisting watches	..	..	.. 24 0 0
CC. The same watch with double and extra strong case, 18 carat gold, artistically engraved, engine turned or plain polished, with monograms, initials, &c.	..	..	.. 26 10 0
D. Imperial calendar chronometer, 18 carat gold, indicating the day, the week, the month, and date of month, jewelled in 18 actions, with all the latest improvements and inventions, one of the best and most magnificent watches manufactured, such as are never sold by retail dealers for less than £25	..	..	.. 210 0 0

All our watches are manufactured in 2 different sizes, large and small—for gentlemen and ladies—without difference of price. Old watches, old gold and silver will be taken in payment at the highest value; if forwarded by parcel post to our address. Remittances may be made either by postal order, cheques, bank notes, postage stamps for small amounts, of any country, in registered letter. It is our aim to give the utmost possible satisfaction to our clients, knowing this to be the best advertisement for our products, and all who have once entered into business relations with us gladly recommend us to their friends and acquaintances. Address for letters and orders—

MORSE MANUFACTURING CO.

7, Red Lion Court, LONDON E.C.

Wanted at once in every locality an intelligent person to act as our Agent. No special knowledge required, and without interfering with present occupation. Highest salary and commission. An excellent opportunity for a capable young man or lady.

DO YOU WANT A REALLY GOOD, CHEAP & USEFUL PAPER?
THEN TRY THIS ONE! YOU CAN'T DO BETTER!

Its Articles are Short, Sharp and Practical.

100 ordinary pages condensed
in 24.

Its Articles are Short, Sharp and Practical.
100 ordinary pages condensed
in 24.

Martin's Home & Farm

For the Busy Practical Working Farmers of
Australia.

Interesting & Instructive to the Wife and Children, as well as the Father.
The Paper for every Home & Farm. It claims your support.

Home & Farm Publishing Co. 161 Clarence St., Sydney

With Australian Bee Bulletin, 7s per annum.

Did you Read

That Mrs. Jennie Atchley is one of the largest queen breeders in America. She will send you queens to Australia, or other foreign countries at the following prices:—Untested queens, 4/- each; tested, 8/-; and fine breeding queens of either race she breeds, \$1 each. By mail, post paid at above prices; no guarantee of safe arrival. Queens sent by Express, safe arrival guaranteed, for 10/- each extra for the purpose of prepaying Express charges. I breed the Italians, Cyprians, and Holylands, in their purity, also the Five Band Italians. Each race of bees are bred in separate yards not less than seven miles apart. My long experience in sending queens to foreign countries has enabled me to successfully land them safely, with but few losses of late. My International Money Office is Victoria Texas, USA. Address your orders,

MRS. JENNIE ATCHLEY

BEEVILLE, BEF Co., TEXAS, U.S.A.

P.S.—I will give free with each order amounting to \$1, one year's subscription to our bee-paper, *The Southland Queen*.

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

A REAL BEAUTY!

Telangaluh East,
May 17th, 1897.

To Mr. BOLTON, Dunkeld.

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

Yours truly,
GEORGE WILLIAMSON.

SPRING PRICES—Untested, 5/-; tested, 8/-; select tested, 15/-. 25 per cent. extra for delivery before October 1st.

T. BOLTON,

Grampian Apiaries, Dunkeld, Vic.

The Australian Pastoralist, AND BREEDERS' GAZETTE.

PUBLISHED MONTHLY.

Price, 3s Per Annum.

Contains all the leading Pastoral Intelligence.

Address Orders—

P.O., Woolloongabba,
BRISBANE, QUEENSLAND.

Pop your Order in the Post

ADDRESSED TO US.

—:—

Customers Ordering by Post

are treated in the same way as

CUSTOMERS BUYING AT
THE COUNTER.

The same prices are charged, and selections are made by specially trained assistants from the same stocks. . . .

—:—

PATTERNS AND PRICES SENT
EVERYWHERE.

—:—

**ANTHONY
HORDERN'S,**
Universal Providers,
HAYMARKET ONLY, SYDNEY.

'The Australian Agriculturist'

A MONTHLY JOURNAL

For the Farm, Garden, Orchard, Poultry, Bees
and other Interests of the Country,
and Suburban Home.

5/- PER ANNUM

To any part of Australasia.

Head Office: 460 George-street, Sydney.

The Farmer & Grazier

The Best Illustrated
Farmers' Journal in Australia.

7s 6d PER ANNUM.

J. TWOMEY & CO,

52 Market Street,
Melbourne.

T H A N K S !

To my Bee Friends and Patrons.

By the time this is in print the present breeding season will be almost closed, and I take this opportunity to thank you all sincerely for the most liberal patronage you have bestowed upon me at all times, and during this season in particular. The demand at times was very great, and to meet your wishes I strained every nerve to prevent any delays or disappointments. That I pleased you all I have ample proof in writing, which is very gratifying indeed. Considering the large guarantee I give with untested queens (viz., 80 per cent. purely mated), and that a greater percentage than this has been attained, my location for queen breeding is therefore proved to be A1.

I have already placed my orders for both Italian and American consignments of Brood Queens for next spring, and shall therefore be in a position to supply Queens next season, quite up to my usual standard. Trusting that I shall then maintain your confidence, and thanking you in anticipation. —I am, yours faithfully,

A. J. BROWN,

LEAFORD APIARY, PARKVILLE.

A Few Volumes of A.B.B.

1895-6 (VOL. IV)

FOR SALE FOR 3s. 6d.

E. TIPPER.

—1896-97.—

PRICE LIST BEEKEEPERS' SUPPLIES.

Page.		Rair.
24	HIVE CARRIERS ..	1/6
	HONEY BOARDS.	
	Each. Dozen.	
No. 1,	10 Frame Zinc ..	1/- 10/-
11, 8		1/- 10/-
2; 10	.. Simplicity	
	Wood Bound ..	1/- 10/-
12, 10	Frame, dovetailed	
	Wood Bound ..	1/- 10/-
13, 8	Frame, dove-tailed	
	Wood Bound ..	1/- 10/-
Honey Cans,	Counter, 16/- each	
"	" Plain, 12/- each	
Honey Tanks,	5cwt., 22/6, 7½cwt, 32/6, 10cwt, 42/6 }	

HONEY JARS.

	Dozen.	Gross.
1 lb. Round or Upright (Col.)	2/6	27/6
1 lb. Square ..	2/6	27/6
1 lb. Upright (Blow's) ..	3/0	31/0
2 lb. Round (English) ..	4/0	42/6
2 lb. Round or Upright (Col.)	4/0	45/0
1 lb. Upright with Parchment	2/3	24/0

HONEY TINS.

	Dozen.	Gross.
1 lb. Round (Patent Tops)	1/3	12/0
2 lb. " do. do.	1/9	17/0
4 lb. " do. do.	2/6	27/6
7 lb. " do. do.	3/0	32/6
14 lb. " do. do.	6/6	72/0
28 lb. (Square Corners) 2in		
Lever Tops ..	7/0	75/0
28 lb. (Square Corners) 1½ in		
Bung Hole ..	7/0	75/0
28 lb. (Square Corners) 1½ in		
Screw Tops ..	8/0	90/0
28 lb. (Square Corners) 3 in		
Screw Tops ..	9/0	100/0
28 lb. (Square Corners) 4 in		
Screw Tops, made to order	9/6	108/0
not stocked ..		
60 lb. 2 in. Lever Tops ..	10/0	110/0
60 lb. 1½ in. Bung Hole ..	10/0	110/0
60 lb. 1½ in. Screw Tops ..	10/6	120/0
60 lb. 3in. " " ..	11/6	130/0
60 lb. 4in. " " ..	12/6	135/0

NOTE—

Case and packing, when required,
for above tins 1/6 per gross, or
any less quantity to 3 dozen
(3 dozen or under, 1/-)

Page.		
25	Honey Pails, 3 in nest ..	1/3 nest
	" 5 in nest ..	1/9 nest
	" Dadant's ..	-/6 each
	Hammers, Tack ..	1/6 each
	Hive Clamps, Van Densen, -/3 pair, 2/-	
	dozen pairs	
	Hive Carriers ..	1/6 pair
	HONEY KNIVES.	
	Novice ..	4/- each
	Abbott's Best ..	4/6 each
	Bingham, American ..	6/0 each
	Knife HEATERS with Lamp ..	4/6 each
	METAL CORNERS, for frames, 1/6 per 100	
	METAL RABBETS, -/9 dozen or 8/- per gross	

NAILS.

5in. ...	-/8 lb., 7/6 dozen lbs.
4in. ...	-/7 lb., 6/0 "
3in. ...	-/5 lb., 4/6 "
2in. ...	-/5 lb., 4/6 "
1½ in. ...	-/4 lb., 3/6 "
1in. ...	-/4 lb., 3/3 "
¾ in. ...	-/3 lb., 2/9 "
½ in. ...	-/3 lb., 2/6 "

PAINT.

Any Colour.

1lb. Tins ..	-/6 each, 5/- dozen
2lb. Tins ..	1/- " 10/- "
4lb. Tins ..	1/9 " 19/- "
7lb. Tins ..	3/- " 32/- "
14lb. Tins..	5/9 " 65/- "

PERFORATED OR QUEEN EXCLUDING ZINC.

Sheets 8 ft. x 28ins., 7/6 each, per running foot, 1/3 ft.

QUEEN CAGES.

26 Benton's, small ..	-/3d each, 2/6 dozen
" long distance ..	-/4 " 3/6 "
West's Cages ..	-/6 " 5/- "
" Queen Cell Pro-	
tectors ..	-/3 " 2/9 "
Doolittle's Queen Cell	
Protectors ..	-/2 " 1/3 "
QUEEN REGISTERED	
CARDS..	-/4 dozen, 3/6 gross

Discounts

Orders £2 or under ..	Net.
£2 to £5 ..	2½ p.c.
£5 to £10 ..	5 p.c.
£10 to £20 ..	7½ p.c.
£20 and over ..	10 p.c.

HEBBLEWHITE & CO.,

OPPOSITE SYDNEY ARCADE & STRAND,
George Street, SYDNEY