



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The Australian bee bulletin. Vol. 4, no. 43 October 24, 1895

West Maitland, N.S.W.: E. Tipper, October 24, 1895

<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.

BEE BULLETIN.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

No. 43. OCTOBER 24, 1895. PER COPY, 6d
Per Annum 5s, booked 6s 6d; in Australasia, outside N.S.W., add 6d. postage.

NEW CATALOGUE NOW READY.

much as 25 per cent. Reductions in some Lines.

you have not received one by the end of October, just send a post card and one will be forwarded by return post.

YOU CANNOT AFFORD TO BE WITHOUT ONE.

PENDER BROS.,

(Late R. L. Pender,)

MANUFACTURER OF BEE-KEEPERS' SUPPLIES
 WEST MAITLAND, N.S.W.

R. K. ALLPORT,

uter St., off Union St., NORTH SYDNEY.

fore ordering any Bee Goods, write for my Catalogue, 1895-1896.

ces Reduced, in many cases as much as 25 per cent.

number my hives are made of **Californian Redwood**, which
 not rot, warp or shrink and have no Chinese dovetails to split
 des when putting together. They are cheaper and better than
 hers.

AX AND HONEY TAKEN IN EXCHANGE FOR BEE SUPPLIES.

ving for good wax **1/1** cash or **1/2** if goods taken in exchange

OME FOUNDATION.

arriage paid on 5lb. lots and over at Cheapest Prices.

HONEY TINS.

LEVER TOPS.

	s.	d.		s.	d.
1lb per dozen	1	3	Not less than gross	12	0
2lb "	1	9	"	17	6
4lb "	2	6	"	27	6
7lb "	3	0	"	32	6
14lb "	7	0	"	75	0

HONEY JARS.

		s.	d.		s.	d.
1lb plain top	doz	2	6	gross	27	6
1lb nickel	"	3	0	"	33	0
2lb do	"	4	6	"	48	0
2½lb plain	"	4	6	"	48	0
1lb tie-over	"	2	6	"	28	0

	Doz.	s.	d.	Not less than gross.	s.	d.
28lbs export, bung hole	7	0	75	0		
28lbs " lever top	8	0	99	0		
28lbs " 1½in screw top	8	6	95	0		
28lbs " 3in. "	9	6	105	0		
28lbs " 4in. "	10	0	110	0		
60lbs " 1½in. bung hole	10	0	110	0		
60lbs " 2in. lever top	11	0	120	0		
60lbs " 1½in. screw top	11	6	120	0		
60lbs " 3 in. "	12	6	130	0		
60lbs " 4in. "	13	0	135	0		

ILLUSTRATED PRICE LIST (FREE.)

Hebblewhite & Co.,

377 GEORGE-ST., Opp. Sydney Arcade & 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 some what 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 posted.

SEND FOR ILLUSTRATED CATALOGUE.

The Bee-keepers' Supply Co.,

FRANKLIN-ST., MELBOURNE.

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

Queens direct from Doolittle.

Prices of Queens to Foreign Countries will be as follows:—

Very Best Breeding Queens sent by mail..\$6 00

Best Tested Queens, 1894 rearing\$4.00

Best Select Tested Queens, 1895 rearing ..\$2.50

Best Select Untested Queens, 1895 rearing \$1.25

Take International Money Order payable to me at Skaneateles, N.Y. I do not guarantee safe arrival of queens, but should any come dead, I will send another at half price. Write for circular telling all about each class of queens, &c., which is sent free.

ADDRESS—

G. M. DOOLITTLE,

Barodino, Onondaga Co., N.Y.,

U.S.A.

FOR SALE.

ABOUT 30 HIVES OF BEES
(Hybrids and Italians), in
Munday Hives and in very fair
working order. Apply to

E. E. BUTTSWORTH,
CESSNOCK.

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.

THE AUSTRALIAN

FANCIERS' CHRONICLE,

DEVOTED TO

**Poultry, Pigeons, Canaries, and
Dogs.**

PUBLISHED FORTNIGHTLY.

ILLUSTRATED MONTHLY.

FOUR-PENCE PER COPY, AT ALL
NEWS AGENTS.

Post Free in N.S.W. 4s 6d half-yearly, 8s 6d.
yearly.

E. LEE & CO., 53 MARKET ST., SYDNEY
Printers and Proprietors.

OCTOBER 24, 1895.]

The Australian Bee Bulletin.

BEE-HIVE

AND
ALL NECESSARY APPLIANCES

Made from the best and most suitable materials by
skilled workmen, under the directions of

A. I. ROOT,

the most successful Bee-keeper and Appliance
facturer in the world.

Price Lists and
Illustrated Catalogues
POST FREE.

Freight paid on Goods to Tasmania, Western Australia,
South Australia, Victoria, Queensland, and New Zealand
for orders of £10, with Hives excepted.

HEBBLEWHITE & CO.

377 GEORGE STREET, SYDNEY

Printed by E. Tipper, proprietor, High Street, West Maitland, New South Wales

Some

Prices

No. 1—8 F
R—

No. 2—8-f
wi
tra

No. 3—8-f
wi

frame Dovetailed
bottom board and
0 frame Dovetailed
10 frame Dovetailed
10 shallow frames
0 frame Dovetailed
follower.

No. 1—Do

No. 2—

No. 3—

No. 4—

No. 5—

No. 6—

No. 7—

ame Novice Ex
basket, (we

ame Novice Pl
basket, (we

ame Novice Ex
basket to fi

ame Cowan's R

ame Cowan's

(weight 48

gle-frame Sling

IBER.—Comb

PEN

MANUFA

E Some of our Prices for 1895-6.

Prices of 8 and 10-frame Dovetailed Hive.

No. 1—8 Frame Dovetailed Hive complete (single story) includes one body with 8-R-Hoffman frames and follower, bottom board and one flat cover.

No. 2—8-frame Dovetailed hive complete (one-and-a-half story) includes one body with 8 R-Hoffman frames and follower, one half-story with 8 shallow extracting frames and follower, one bottom board and one flat cover.

No. 3—8-frame Dovetailed Hive complete (one-and-a-half story) similar to No. 2. with 6 section holders instead of 8 shallow frames.

10 frame Dovetailed Hive (two-story) includes two bodies, 16 R. H. frames, 2 followers, bottom board and flat cover.

10 frame Dovetailed Hive, similar to No. 1, made to take 10 frames without follower.

10 frame Dovetailed Hive, similar to No. 2, made to take 10 frames without follower, and 10 shallow frames without follower.

20 frame Dovetailed Hive (two story) similar to No. 4, made to take 20 frames without follower.

	nailed up.	In the Flat				weight of 5 hives.
		1	5	10	25	
No. 1—Dovetailed Hive	6/3	5/9	5/3	5/-	4/9	115 lbs.
No. 2—	8/-	7/9	7/-	6/9	6/6	150 "
No. 3—	8/-	7/9	7/-	6/9	6/6	150 "
No. 4—	8/-	7/9	7/-	6/10	6/9	175 "
No. 5—	7/-	6/6	6/-	5/9	5/6	120 "
No. 6—	9/-	8/6	7/9	7/6	7/3	160 "
No. 7—	10/-	9/9	9/-	8/9	8/6	185 "

Prices of Extractors.

same Novice Extractor, with side gear, and 30lbs. capacity under basket, (weight 27lbs)	..	..	..	..	£1 15 0 each
same Novice Extractor, with side gear, and 100lb capacity under basket, (weight 28lbs)	..	..	..	..	1 17 6
same Novice Extractor, with side gear and 100lb capacity under basket to fit both Hoffman and Munday wide frames (weight, 28lbs)	..	..	..	..	1 19 6
same Cowan's Reversible, side gear (weight 46lbs)	..	..	..	..	2 10 0
same Cowan's Reversible, side gear, 130lbs capacity under baskets (weight 48lbs),	..	..	..	..	2 14 0
single-frame Slinger (weight 5lbs)	..	..	..	..	0 10 0

Prices of parts on application.

IBER.—Comb Foundation FREE to any Railway Station in the Colony in lots of 5lbs and over.

PENDER BROS. (Late R. L. Pender),

MANUFACTURERS OF BEEKEEPERS' SUPPLIES,

WEST MAITLAND, N.S.W.

OCTOBER 24, 1895]

The A

THE AUSTRALIAN AGRICULTURIST

IF you are interested in Farm, Garden, Orchard Work; in Horses, Cattle, Sheep, or Pigs; if you keep Poultry, Dogs, or Bees; if you want a good home journal, devoted to all the interests of country and rural life, take the "Agriculturist."

We ask you to see sample copy, which we will send on application.

Subscription—Half-a-Crown a year in N.S.W. Three Shillings in Vic., S.A., Tas., N. Zealand, or W. Australia.

PUBLISHING OFFICES:
SYDNEY, 298 George Street



DO YOU WANT

Then Try on

GENTLE GOLDEN

Carefully bred from Mothers

TESTED 10s.

On all orders for £1 and over 10p

R. Patten, Binni Apiary,

WEST MAITLAND, N.S.

tered at the General Po

THE
BEE

A MONTHLY JO

No. 44.

er Annum 5s, booked 6s

Delays are Dangerous

And I regret that I have been compelled to delay the orders of so many of my customers the past month. Orders from all parts of Australasia have poured in at such a rate as to have been utterly impossible to keep pace with them—consequently I am behind. For my bequeens there has been a particularly strong demand, and although I have already sold a good many, I have still so many orders booked that I cannot stipulate to forward any until 1st December. I am now testing for breeding purposes a number of extra fine queens this season's raising, and the best of these I will be prepared to despatch after above date. In need of an especially fine breeding queen, that will do you good service for several years, book your order now, and you can send cash on receipt of queen. I will guarantee my queens to be equal in all respects to any obtainable.

My stock of Tested Italian Queens is also exhausted, and I have so many of these that I cannot supply any more till 15th Nov., after which date I can guarantee prompt delivery of any number.

Untested Italians and Carni-Italians I am shipping daily; still I have so many orders for delivery that I cannot guarantee dispatch of any further orders until after 10th Nov.

One gratifying feature about this rush of orders is the fact that the bulk of them are from apiarists who have given my strain a thorough trial, which I think speaks for itself.

"I have seen some of your queens, and consider them about the best that can be produced for the purpose. I have several queens from different breeders, but the best I have is a descendant of your breed.—T. S. H. River, N.S.W.

"The queens that I got from you last season have pleased me so much that I now enclose a cheque for £10.—R. S. H., Nyngan, N.S.W.

"All the queens I have raised from the breeding queen you sent me have given splendid results. They have proved themselves to be practically non-swarmers. Please send the queens ordered from a non-swarm.—S.A.L., Cundletown, N.S.W.

"I received from you two years ago two Carni-Italians, which gave good satisfaction—splendid honey-gatherers. Enclosed find P.O.O. for £4, for which please send me value in queens as usual.—Williamstown, South Australia.

For Prices, &c., see my 1895 Catalogue. If you have not a copy send me your name and I will send you one post free.

H. L. JONES

Goodna, Queensland

W CATA

POST

PRICES TH

EXTRACTORS.—

bevel gearin

with 100lb c

2-frame Cowan R

2-frame Cowan Re

TAILED HIVES fro

These Hives ar

ther lines have been redu

PENDE

MANUFACTURE

R.

ter St., off

ordering any Be

s Reduced, in

nber my hives are

ot rot, warp or sh

es when putting t

hers.

AX AND HONEY

iving for good wax

Carriage paid on

The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEEKEEPING.

MAITLAND, N.S.W.—SEPT. 24, 1895.

WE have often, in our past life, when things were looking dark, said to ourselves, did we but know it there's sure to be a door within our grasp that to but turn the handle would lead us into light. And as after years went by we could see where these doors had been, and the various opportunities we had missed. Is it not so with beekeeping now! Are there not doors close to our hand that but to turn the key will give light and comfort to the beekeeping fraternity? We fancy there are. In a short time summer will be on us, and with it hot weather and thirsty times. And there are times when nothing will satisfy the thirst of the parched man or woman. It is then that those who love intoxicants will go for the long sleepers, the more temperate for the cup of tea or the usual run of temperance drinks.

At the same time there will be abundance of honey, the market will be glutted perhaps, and those who are not able to stand out of money will sell at far less than it is worth.

Before the many what may be called liquors of commerce came into vogue, with their body and soul destroying influences, before the nerve-destroying tea was known in civilised countries, our forefathers drank simply water or home-made drinks—home-brewed ale, or pure honey mead. It was stuff that did not fill the gaols and lunatic asylums, but made those who drank it hearty and strong. It was drunk by the men who fought at Agincourt and Cressy, and with the Spanish Armada. And our women were not made nervous creatures with tea drinking as too many are now. Can we imagine what profits are made on the sale of ale of one kind and another

every year? Also on all kinds of what are termed temperance drinks, many of which are far more hurtful to the human system than out and out intoxicants?

Now beekeepers have an opportunity of making and selling a drink that is health giving and has none of the defects of the other popular drinks mentioned, and we venture to say that honey mead once introduced in a proper form to the general public it would soon become the most popular drink in Australia.

In its manufacture cappings and honey of unfavourable flavour can be utilised.

Get it up well and in a presentible form, have it nicely labelled, and its bound to go. We do strongly recommend beekeepers to think this matter over, we are positive there's a future in the idea.

We will conclude by asking those beekeepers who have had practical experience of making honey beer or mead to send their mode of making along, so that we can publish them for the benefit of others.

Sorry to have to hold over to our next a lot of valuable correspondence.

We acknowledge receipt of the Annual Report of the Beekeepers' Association for the Province of Ontario, 1894.

Quite a number of correspondents complain of losses by paralysis or other disease. We are sorry—and perhaps it would not help to mend matters—room will not permit us to give them all, but they all point to one thing, that if the Government of New South Wales can do one thing to help the bee industry it will do so by keeping good scientists at their service.

We have received another excellent apiary photograph, that of Mr George Packham, of Molong. It is a capital picture, the hives are well arranged at fair distances, and our worthy friend himself, frame in hand, sets off what we feel assured is a well managed, and, if the honey flow is about, good paying apiary.

N.B.K.A.

A meeting of the committee of the above took place at Messrs. Hebblewhite's, Sydney, on Friday evening, Oct. 18th. Present—Rev. J. Ayling (president) in the chair; Messrs. Ward, Cad-den, Abram, Tipper, Wilshire, Bloxham, Whittell (hon. sec.)

Minutes of previous meeting were read and adopted.

Mr Whittell announced that he had received from the Department of Agriculture 200 copies of Mr Helms' pamphlet "The Honey Bee," and Mr Guthrie's "Honey, its compositions and Adulterations"—to be distributed amongst beekeepers.

Letter received from the Mayor of Bathurst, with thanks for photograph of Convention group received.

From Mr W. S. Goard, president of Murrurundi B.K.A., asking for refund of fare paid by him to go to the Convention. The secretary explained the circumstances of the matter, and it was left to him to reply to Mr Goard.

From Mr Niven, secretary of the Lachlan B.K.A., that that association had been considering the best means of defraying the expenses of the N.B.K.A., and had passed a resolution suggesting the following:—That members of associations pay 2s 6d each, and a levy of 1s. each be paid towards the N.B.K.A.

Mr Bloxham thought it was too serious a thing to attempt the alteration of the laws at this committee meeting, and suggested the appointment of a special committee to revise the constitution and rules, and to submit a report in a month or six week's time.

On the motion of Mr Tipper, seconded by Mr Ward, it was resolved the committee consist of the following gentlemen living in or near Sydney:—Messrs. Bloxham, Abram, Ward, Trahair, and Whittell. The same committee were also empowered to draw up rules re affiliation with other kindred societies and make a progress report.

Mr Whittell spoke to the reply of the Railway Commissioners re the classification of honey, that they could not alter

the B rate. It was not the alteration of the B rate that was wanted, but the transference of honey from B class to A class. The application was made through the Agricultural Department, though the reply had come direct from the Commissioners to him. He suggested that a deputation wait direct on the Commissioners.

Mr Cadden proposed, and Mr Whittell seconded, that Messrs. Whittell, Trahair, Bloxham, Ward, and Wilshire be a deputation and represent the matter to the Commissioners.

Mr Whittell stated he had seen a new draft of a Foul Brood Act prepared by the Minister for Agriculture, in which were no taxing clauses.—(This we purpose issuing in a special edition in the course of a week or so.)

Mr Abram said he had lately come in contact with a good few beekeepers and found there was a serious loss amongst bees, and that if it continues another year or two there would not another bee be left in the country—all dwindling away from one reason or another. He was positive it was a new kind of disease—it was nothing less than a disease. The general run of beekeepers were not sufficiently educated, and he thought this matter was really one that we should approach the Government over. He would suggest the same deputation wait upon the Minister for Agriculture and point out the great loss beekeepers have sustained, and to urge upon him the necessity of thorough investigation and experimentation to check or cure the same.

The suggestion was agreed to.

Mr Abram moved and Mr Cadden seconded that we take steps to procure a special grant from the Government same as was allowed to the Agricultural Associations. Carried.

Apologies were received for the absence of Messrs. Richards and Patten.

It was resolved the meetings in future be held on Friday afternoon, to enable committeemen from the country to return home same evening, except when it was likely business would lead to a deputation, when time of meeting be left to the secretary.]

THE PROPOSED N.S.W. FOUL BROOD ACT.

STRINGY BARK.

As *Bombus* in the August number of the *A. B.B.*, invites the opinion of brother beekeepers on the matter of the Government sending a lecturer through the country for the purpose of inducing people to take up beekeeping in conjunction with their present occupation, or as a separate venture, I think there are many who thoroughly condemn the practice but do not care to speak out against it on account of being thought selfish, &c.

Now, Sir, if the beekeepers of this colony were to ask the Government to allow the *Id.* to duty on honey to remain on they would be told "off it must come" as the beekeepers interests could not be studied any more than any other trade or business.

This being so; why, in these days of retrenchment do they still continue the office of Lecturer in Bee-keeping at a cost of (I am told) £300 per annum, and all travelling expenses, and sent throughout the length and breadth of the colony telling people that enormous profits are made at beekeeping, also that no skill or knowledge is necessary, and no capital is required, and thus creating very wrong impressions as to the industry.

Then again, I read in your valuable paper that N. B. Association have been trying to get a Foul Brood Act introduced and passed into law, the chief objection to which seems to be the expense of appointing an expert to carry out the provisions of such an Act; why not abolish the office of lecturer and then the necessary funds would be available to administer a Foul Brood Act?

Every year the office of Lecturer is kept going, the necessity of a Foul Brood Act becomes greater, as the number of amateur beekeepers who start through the glowing accounts given them by the Government Lecturer of the enormous profits, &c., are in great measure the cause of spreading disease, as in a short time not being able to realize in bee-keeping the paradise they were led to expect they become disgusted and neglect their bees, with the result that disease creeps in, spreads to their neighbours, and so on from one district to another. Those beekeepers who earn their livelihood by the industry will I think bear me out in saying legislation is necessary in this matter, and if they can suggest any other way of overcoming the question of expense in carrying out a Foul Brood Act let us hear from them.

To anyone who may hazard the opinion that this is a sort of selfish letter, and to show that the writer has the interests of the industry at heart, I say there is plenty of scope for those who may think of entering into beekeeping, but I say, do not lead anyone into the belief that a

livelihood can be earned at it without either knowledge or experience.

If the lectures are to be continued let the Lecturer give his hearers "instruction in beekeeping" and not statements such as several of your writers have complained of.

J. L. M. SCHOMBERG.

I see there are still agitators for a Foul Brood Act. A man that can cope with the bee disease can be termed a scientific beekeeper, and wants no act or inspectors. What we do want is licensed honey venders to bear their names and labels on their honey to cope with the fraud and petty honey sellers. A man could afford to pay at the rate of 3d or 6d per hive for this protection and would give the honey farmer a chance of a living. I greatly agree with Mr. Bagot's letter of last month and also *Bombus*, and congratulate them, and I think the latter has an older and longer head than W. P. imagines. W. P. states that we do not raise enough honey to give every one in the colony a taste. Singular, considering that perhaps half these people don't want our honey, it is at the reach of everyone, sold from 1d to 2d, and if we are not raising enough honey for our own consumption, why send it to the world's market, England, where it was sold from 11s to 13s per cwt, and then had to be sold privately to get rid of it. Take freight and dock duties and commission out of it and ask the beekeeper will it pay, and he will very likely reply that he had to pay 8s or 10s per cwt to defray expenses. Let Mr. W. P. read the papers and deny my statement if he can. Beekeeping perhaps is only budding but it will soon collapse to a full out blown rose. Beekeeping is on the verge of a failure and people almost prefer bush honey to extracted, as the latter only fetches $\frac{1}{2}$ 1 more in the Sydney market. By the bye what about the Sydney Co-operative Honey Supply Co. I have not heard much of that lately?

LOYALSTONE.

I read in the September number of the *AB.B.* with sorrow that beekeepers are

becoming jealous and envious of one another, which I consider a very bad state of affairs. They are thoroughly disorganised and instead of trying to make things better they make matters worse. Why don't they, for their own benefit, band themselves together in one solid body and then we should hear no more of honey at 1d per lb. And every beekeeper, large and small, would prosper and assist one another, and a hum of harmony would be among all beekeepers. Some may say,—such a thing as the above would not work; but I will tell you how to work it. In every place throughout N.S. Wales let an Association be formed and let every beekeeper join in each district and pay the small sum of say 1s per year for membership, and every such association to pay so much per year, say 10s or £1 to the N.B.K.A., and in time we would have one solid body and push our way to the front, and every one prosper. I would write more on this subject, but am afraid I would trespass on your space too much. With regard to lecturers going round the country, I think that they should not always put the bright side of the business to their audience, but let them know also what they have to contend with. Lecturers on beekeeping are always given to too much "blow." The introduction of the F.B. Act would be done away with on the formation of an association in each district, making a slight penalty on any member who has a contagious disease in his apiary and does not acquaint the secretary of his Association on the first appearance of it. Beekeepers will not stand a tax of any kind and I do not think it right that they should. If it is pointed out to every beekeeper in each district how he will benefit by helping to join an association in his district, I am sure he would not hesitate about joining. If you favour this method of banding beekeepers together in N.S. Wales, Mr. Editor, I would be glad to forward you the rules for members to adhere to on joining any association of this kind. I note one of your correspondents, X.Y.Z.,

had some of his bees dying, and did not know the cause. I think he will find they were suffering from some kind of dysentery. He can easily cure any disease of this kind by taking the frames out. Leave the one with the queen on in the hive, take the others on a warm day fifty yards away, shake all bees off, and return frames to the hive. The bees in flying back to the hive will rid themselves of the disease. Any beginner who has a puzzling disease in his apiary—do the above, and when bees fly back to hive sprinkle them with sulphur, or smoke a little into the hive—not too much, or you will smother them.

A. T. J., DENILQUIN.

I have been going to write to you for a long time past to let your readers know a little about beekeepers in general in this district, and with this object in view, I will state that beekeeping is not gone into extensively at present here. Some few years ago it was different, most people having their hive of bees; but foul brood conquered them, including myself, and beekeepers supplies were for sale by the score.

This district could not be better suited for an apiarist, there being an abundance of trees, in fact it is one dense forest for miles around, and in close proximity to the town.

I have been reading the various comments in your journal on the foul brood act, and in my humble opinion the letter of Mr. D. Grant in your last issue is precisely what is wanted, viz, that the matter should be dealt with locally by those interested. Many of my fellow beemen have had to destroy several of the stores that their bees were wintering down upon, caused by careless people that keep bees but do not look after them. As a matter of fact I know of a case that after the bees died off (caused through foul brood) the combs were emptied out on the open ground. What was the consequence? Why, the men that looked after their hives were just as bad off in a few weeks as the careless man.

The above few lines is an illustration that the foul brood act is badly wanted, and something on the same lines spoken about by Mr Grant. Government inspection would be a farce; the local inspectors being the only way to minimise the evil that is rapidly making headway, in this district at any rate.

In "Apis Trigona's" notes re foul brood act, he states that where any district is heavily timbered the wild bees suffer from the disease as well as the hived bees. I do know how it is to be accounted for, but when foul brood was rampant in this town one would very rarely, if ever, see it out in the bush—in fact I have felled some dozens of trees and not in one instance did I find traces of foul brood in any of the hives, a great many of which were very old as shown by the combs. This district is in every way suitable for bee culture, the only drawback, however, being the want of a market, only having access by rail in one direction and that to Victoria, one cannot do business at any price on account of the duty, and to send to Sydney the profits would be eat up in carriage. Small quantities of honey are sold by the box-hive men at about twopence per pound.

Foul Brood is very prevalent at the present time here, and eighteen months ago there was hardly a sign of it. Various remedies have been tried here to conquer it but without success. Some few months ago you mentioned in your columns a new German remedy called "Lysol." A friend of mine has procured some and is now trying it together with the starvation plan, the result of which I will let you know later on. Wishing the A.B.B. every success.

J. B. STEPHEN.

I for another don't at all agree with the spirit displayed by "Bombus" in your issue for August and also in the September number. I think it a mean, narrow minded, pessimistic spirit, not at all in keeping with the motto which he professes to hold, viz., "The greatest good to the greatest number." Does that motto mean that if we find out a good thing we are to keep mum about it, or if anybody wants a little information to tell him to go and find out him-

self. Thank goodness men of this spirit are few and far between; life wouldn't be worth living if there were much of such selfishness about. What if all the pioneers of beekeeping had displayed such a spirit,—if we had been deprived of all the information they have given us and are still giving us. According to "Bombus'" reasoning, it was a mistake ever to have published the A.B.C. and such guides to beginners; beekeeping should be kept to a select few.

Moreover, I think "Bombus" makes a great mistake in his idea of keeping the price of honey up by keeping down production. There is not over production but under consumption that needs a remedy, and we need to turn our attention more to making the use of honey more general than it is at present. Besides this, his fear of so many beginners becoming considerable producers is exaggerated. Beginners are heavily handicapped in having to compete against old hands. If they enter the business through bearing of 750lb averages, &c., the chances are that the first year will knock that out of them. What with small yields and the 100 to 1 difficulties that have to be overcome, it wants some enthusiasm and perseverance to get past the beginner's stage, and I doubt if one in ten ever do so. Is "Barktown" a neighbour of "Bombus"? He has evidently run against something of the same spirit, but I don't think he is right in accusing old hands generally of keeping information to themselves. Is it not a noticeable thing, at any rate of the American beekeepers, that they spread their information broadcast, which, no doubt, "Bombus" reckons a great mistake! But what else would have made beekeeping in America the great and important industry that it is to-day? No, if we want to see beekeeping grow into any importance in these colonies, we must not go in the way "Bombus" would lead us.

N.B.—I am *not* a supply dealer.

CECIL PENNEFATHER, L

From the tone of numbers of your correspondence letters in recent issues of your journal, re the proposed F. B. Act, it would appear that a considerable number of beekeepers are pessimists of the first water. Even supposing as has been argued that F.B. is non-existent in this part of the colony (N. E. district) surely that is no reason why it may not make its appearance at any time. I may remark that in some of the colonies obtained from bush trees, I have, on one or two occasions, seen appearance strongly indicative of F. B. In any case suppose it be proved beyond doubt the disease cannot exist in certain parts of the colony it is surely the very acme of selfishness, for a few favoured individuals, to oppose the passing into law of a measure, which properly administered, means the salvation of a host of reputable hard-working citizens. I am sure (considering the sensational yields reported as sometimes having

been obtained here and elsewhere) a slight tax per colony would be mere bagatelle, and I think it argues badly for our civilization that the few object to suffer such a slight inconvenience to benefit the majority. With regard to some of the objections urged against the measure, I don't see that the proposed inspectors must of necessity be civil servants. Some of the residents in different parts of the colony could be appointed to officiate in their own districts, thereby obviating great travelling expenses. Moreover such inspectors might be appointed by the different bee associations, and not by the Government (though of course under Government sanction) to make periodical visits to the various apiaries in the districts, say once in three months, the beekeepers being obliged (under penalty) to report any outbreak of disease at once to both the Department of Agriculture, and the local inspector. The inspector might be paid so much per colony, and so much per report of each inspection, the report to be forwarded to the Department of Agriculture and a copy to the association in the district, the Government levying a slight annual tax per colony to defray the expenses of inspection, from all the apiarists in New South Wales. I would also point out that the presumptions indulged in by some of your correspondents, viz., That the Inspectors would be "lazy" and loaf about the colony, and be unable in nine cases out of ten to tell foul brood, are entirely hypothetical and without foundation, and are apparently the result of selfishness and pure cussedness. If my above suggestions be adopted no individual will be able to contaminate both bees and humanity, by the propagation of F. B., the honey from such colonies being (I presume) alike injurious to man and insect.

J. & D. CADDAN.

Your editorial in last number and also letters of Messrs. Abram and Whittell do fairly good work in reply to J. R. H. Gaggin in August number re Foul Brood Act, &c. When I read it I fancied he might be one of the budding beekeepers, and also in September number "Apis Trigona," and doubtless his twenty one other beekeepers are what some have called budders. Andreading between the lines confirms the opinion I had formed some time since; and one item I intended bringing before the last Convention was the uselessness of beekeepers meeting in convention who will not join the N.B.K.A. They are quite ready to abuse and threaten to weaken the N.B.K.A., and smilingly take any concessions or advantages gained. I think I voice the opinion of a number in saying next meeting shall be only members of N.B.K.A. Looking at the work done at last Convention, with the largest attendance (110) of any yet, I think little of good resulted. In 1892 about 50 attended Convention. Foul Brood was one of the subjects. Then in 1893, 74 attended Con-

vention, and a deputation waited on the Minister and asked for a Foul Brood Act; and was promised. In 1894, 64 attended Convention, and again Foul Brood was a prominent subject; and in September 1894 A.B.B. reports Foul Brood present in the North, and committee asked to move in the matter. In Oct. 1894 the Minister promised to introduce a Foul Brood Act, and one was drafted, and now only it is objected to, and why? It has been before beekeepers long enough, but the objection comes only from budders I fancy. At last Convention I think a mistake in election of officers and committee was made. Such good men as Allport, Bradley, Mansfield, Scobie, W. S. Pender, and Shallard being omitted, and I am sure it cannot be said that any one of them ever did any but good useful work, and ever ready to attend to any wants or good required. It cannot be expected Mr. Streatfield, of Beneree, can come to Sydney to attend a committee meeting, and so the committee is weakened. Unfortunately the distance is too great for him, otherwise he is a useful beekeeper. Trusting I have not trespassed too much on your space, and leaving other matters till next issue, &c.

"BOMBUS."

Dear Mr. Editor,—I see that Mr. Whittell wishes beekeepers to forward suggestions to headquarters, and as I have a suggestion to make, shall make it through the columns of your splendid little journal, which, I think is improving with every issue. Before I start on this suggestion, however, I should like to make a few remarks on friend Pleffer's letter, who did me the honor to give me a rap over the knuckles and imagined that I was very young. I must confess I felt extremely flattered. Sometimes, though, old heads grow on young shoulders, and sometimes young heads on old shoulders. Some people get their wisdom teeth when very young, and some may be as old as Methuselah and still have no sense. This by the way only. If friend Pleffer will cast his optics on the letter or copy you received from Thomas Blow (August number), he will see that we can't clear 3d per lb. by sending honey to London. Then just under his own (September number) friend Bagot sends account of his returns—ONE PENNY PER LB. Finally I saw in the *Australian Star* of September 27, an account of sales of Australian honey in London, which said honey bringing the magnificent returns of 11s to 13s per cwt. If in the face of this friend P. wishes to increase the production, I hardly know what to think of him. Has he ever calculated the profits the business would yield at the rate of 1d per lb. We will say a person has got 100 hives, and, as we can't all live at Wattle Flat, I presume 200lb per hive would be considered pretty good. This would give the happy owner say £83, or 16/8 per hive. Out of this he has to live for 12 months and get all necessary appliances

besides. If friend P. is satisfied with an income like that, he must be a very Diogenes, or else the amount of enthusiasm he is possessed of makes him independent of the coarser necessities of our existence.

It is an established fact that the fittest only survive, as the others lack "gumption and go," but the fittest in this case are not always those who raise the most honey, but those who can sell it to the best advantage, for I maintain it is quite as important to sell your honey as to raise it. Anybody can send it to an agent and have it sold, but that is not way to get the best returns for your produce. I sell my honey myself and get a good price for it by studying the market, and the wants, tastes and requirements of the public, and I fancy that I endeavour to increase the popularity and consumption of honey more than friend P. gives me credit for. I am not an enthusiast, as enthusiasm does not put food in my mouth, or clothes on my back, or cash in my pocket; but I try to make a living, and think I am doing it by raising as much honey as I can and selling it to the very best advantage. And now for my suggestion.

I have read the letters written by various friends on the Foul Brood Act, and whilst reading I thought of the proverb "That much may be said on both sides and still neither side be right." I think most of the friends hold the idea of an inspector or inspectors untenable. I quite agree with them, and fancy that some of those who are so persistently pushing the appointment of inspectors, are only wishing that the choice may fall on them, which would mean a good screw and a lot of ex's. To my mind that is the wrong way. A lot of hard-working beekeepers have to pay. For what? But this has been thrashed out last month.

The idea I have is shortly this.—Money is to be spent over this affair somehow, whether Government, Association, or beekeepers' money. Now there is no doubt that we have some clever men in the country. There is Mr. Helms for instance. Why could he not be subsidised to make most extensive experiments with *Bacillus Alvei* and try, if need be, a thousand different compounds until he finds one which will effectually destroy the bacillus. Or, if that does not suit, let Government or Associations offer a prize, say £50 or £100, for the recipe of the best Foul Brood Cure. This will, of course, take some time. If, after a while, an efficient remedy is found, let the Government, Association, or whoever the subsidizers are, if they wish to be philanthropic, publish the cure in the A.B.B.; if not let them make a small charge to cover expenses and sell the remedy. This would not be a constant expense to the beekeepers. Those who have no Foul Brood don't want the remedy, and consequently would pay nothing. Those on the other hand who are cursed with it would be glad to pay a reasonable charge to get rid of the pest, as I take it that no bee-

keeper would tolerate foul brood if he could help it. Then if the remedy could be got up in such form that it would not be necessary to medicate the honey, but simply spray or immerse the comb and hives or anything affected, it would just be splendid. All the beekeeper would have to do, would be to drive the bees into an empty box, then spray or immerse hive, combs, &c., return the bees, and everything would be *couléur de rose*. I have no doubt that experiments by one or two clever scientists, would, in a reasonable time, and without much outlay, result in the discovery of a really radical cure. Other bacteria and microbes can be killed, and surely there ought to be something that would be fatal to *Bacillus Alvei* and thus render beekeeping more pleasant, for it certainly does cause those afflicted a lot of worry and anxiety. F.B. in the bush would not trouble much as swarms affected would die out after a time, and as for robbers who bring it to the apiary, beekeepers could apply the remedy at the first sign of disease and always have a clean bill of health. I think it is nothing but the want of a really effective remedy which should be easy of application, which causes all this commotion about the Foul Brood Act. If we can get at the root of this evil, we shan't want any act or any inspector—for everybody who is afflicted will have the remedy in his own hands.

I should have liked to say a few words on the Honey Supply Co., but I think this letter is quite long enough without, so I shall leave it till next month.

A SWITZERLAND BLIND BEEKEEPER.

D. GRANT

In the August number of the "*Revue Internationale D'Apiculture*" just to hand, is a long and most interesting description of an apiary in Switzerland, with photos of it and its surroundings. It is remarkable for two reasons, first that it is over 5000 feet above sea level, only a few hundred feet below the line of perpetual snow, and within $1\frac{1}{2}$ miles of one of the large alpine glaciers with a winter temperature of 50 to 60 degrees below freezing, and snow on the ground for eight months of the year; and second because the owner and manager is not only a cripple, but *absolutely blind*.

This bee master, for such on further acquaintance he proves himself to be, has about 30 hives arranged in two tiers on the south side of a large shed. The other three sides are closed and a door at each end leads into the back part of the shed, where spare hives and combs are stored, and where the operator stands to manipulate his bees. In winter the spaces between and around the hives are filled with dry moss, and large shutters close the open part of the shed.

He keeps a first cross Carniolan, German bee, and has found that the first are very given to swarming while the cross is nearly a non-swarmers. Italians he has found too vicious and not well able to stand the severe winters. He uses a hive containing seven frames about 11 in. square comb measurement, for the brood nest, and shallower frames in the extracting supers, of which he has as many as four on some hives in the photo. He knows when to expect a swarm by the different noises in the hive, and the pip-

ing of the queens. An old straw skep inverted on a stake a few yards in front of the apiary forms a never failing swarm-catcher. He is however but little troubled with swarms, having only had three last year from 25 colonies.

To distinguish the brood from the honey he touches the surface of the comb with a chip of wood and can tell by the difference in the feel of the cappings how far the brood extends.

His plan for uniting colonies, judging the strength of a colony, introducing queens, etc., are all unique in their way, while his dodge for finding and killing an old or condemned queen is too good to pass over. He moves the hive, putting in its place the hive he wishes the bees to go to. This may contain a caged queen (for re-queening) or a weak swarm (as in uniting). He then draws out the back frame of the old hive shaking the bees off, and places it in the new hive. Then he drops into its place a frame full of syrup in the combs.

In a few minutes this is covered with bees. These he shakes into the new hive. He then takes out the next comb shaking off all the bees. This also goes into the new hive. In a few minutes he drops his frame of syrup in, leaves it a while, and when covered with bees shakes them into the new hive. He does this until he gets to the last frame. This one, he says, always has the queen on it and he plunges it, bees, queen and all into hot water. The bees, shaken into the new hive, being gorged with syrup, are always accepted without trouble.

This beekeeper has neither veil, smoker nor brush and uses his hands to remove the bees from the combs. He says, quite contentedly, that his bees know him, and would not sting him because he is blind. He has never heard anything read about bees, nearly all he says and does is from his own observations. He does everything in connection with his bees himself, except foundation making, at which his father helps him and extracting, his father's share of this work being the uncapping.

Francis Huber was blind, but through his servant's eyes he discovered about all that is known of the home life of bees to this day, but he was a man of some means and considerable education. Many of his experiments were suggested by Reaumur and carried out by Huber's assistant, Burners, and I don't think our blind apiarist, self taught and self-reliant, loses much by comparison with his more illustrious predecessor, Huber.

SWARMING.

T. E. W., MORUYA.

In your August number an article on "Swarming" by Mr. W. Shaw interested

me very much, but as one part of it is not in line with my experience, it occurred to me perhaps my plan might be useful to some of your readers.

Mr. Shaw says, "but sometimes after remaining one, two, or three days, swarms will decamp, and *all attempts to stop them generally end in failure.*" That was exactly what set me thinking and experimenting some years back, before ever I had seen a queen bee, or a bar-framed hive. I need not trouble you with details but will give you the result, which so far has never ended in failure with me) though possibly in some cases it might.

If a swarm is within a reasonable distance, I prefer to take a hive and put them in straightaway. In about an hour they can be brought home, shade them well, and pop on an *entrance guard*, and then they are safe. I have never lost a swarm since adopting that plan. It might possibly fail with after swarms, and small virgin queens, but I don't see how it would fail with a prime swarm.

If a very large swarm, the guard can be removed at night and put on again in the morning. Two or three days is generally sufficient, as they settle down to work by that time. I believe in clipping the queen's wings just as soon as I come across her. Possibly my plan may be old to some beekeepers, but as I have never seen it in print, I thought I would send it.

The past season was a terror about here for foul brood. I am surrounded with box hives, and after getting mine clear, they got it the second time, and pretty well wiped me out. I am now left at the beginning of spring with one medium colony. One beekeeper that had 18 swarms now represents them by 0. another that had 25 in boxes has now 3 swarms left, nearly everybody with a few swarms have lost all.

We have had a good fall of rain, and prospects look brighter, but unless bush bees are plentiful; I am afraid swarms will be scarce.

QUEENSLAND HONEY IN ENGLAND.

JOHN SMITH, MOUNT COTTON, BRISBANE.

As there appears to be such a "dead set" on to Australian honey in London, that it has to be sold there at twopence per lb or to blacking manufacturers, and as the editors of British Bee Journals some months ago declared it "unfit for table use," &c., possibly the enclosed cutting from one of the most influential newspapers in one of the largest English cities, will interest your readers. Note, the two samples were taken out of bulk after arrival in England, and were not specially selected samples. Also note the improvement (not deterioration) of the samples after lying open on a shelf for two years. You will also see the writer does not know me nor I the writer, except by reading the clever criticisms on passing events. So having an agent in that city I asked him to send a sample out of bulk, with result, "dead silence for two years, till second sample received, then the first one appears to have been unearthed or more correctly speaking, brought from above, the shelf on which it had been forgotten.

"My next paragraph shall be really sequential. I have just received from a Yorkshire gentleman, Mr. John Smith, settled at Montrose Park, Mount Cotton, near Brisbane, Queensland—a big jar of most delicious eucalyptus honey; and as I know that Mr. Smith is a diligent reader of the 'L. M. S.,' I take this method of thanking him for a charming gift. I tasted eucalyptus honey two or three years ago, and did not like its too aromatic flavour. I then put the jar, still open, on a high shelf, and forgot all about it. When it was, after nearly two years' oblivion, brought out of its retirement, it had become slightly crystallised, and exquisite in flavour, and very soon disappeared for ever. I naturally argue from this that this pure Queensland honey will 'keep' for a long time, and that 'age cannot injure it, or custom stale'—I need not finish the quotation. Mr. Smith is not a personal acquaintance of mine, but he is kind enough to give me this really sweet and practical approval of my 'Talk.'" July 20/95.

For Honey Labels and all descriptions of Printing send to BEE BULLETIN Office.

PORT MACQUARIE.

J. J. BRANCH.

The fifth regular monthly meeting of the Port Macquarie Beekeepers' Association was held in the rooms of Mr James Butler, Horton-street, Port Macquarie, on the evening of Wednesday, September 4th, 1895, the President in the chair. One new member admitted; one account passed for payment. The *American Bee Journal*, kindly donated by Messrs. Hebblewhite & Co., duly received, and the secretary requested to convey thanks of the members for the same.

Resolved that the following prizes be offered by the Association at the next exhibition of the Agricultural Society: No. 1—For the best comb (one L frame) of Italian queen, bees, brood and honey, prize, 10s. No. 2—For the best exhibit of five one-pound sections of honey, the product of Italian bees; prize, 5s. No. 3—For the best Langstroth size frame of honey in comb best suited for extracting purposes; prize, 5s. No. 4—For the best three pounds extracted honey in glass vessels, each containing one pound; prize, 5s. No. 5—For the best exhibit of beeswax, not less than five pounds in one block; prize, 5s.

Resolved that the secretary communicate above to the Hastings River Beekeepers Association as a delegate to their next meeting, or by letter inviting co-operation, and report progress at next meeting.

Resolved that the secretary write the *A. Bee Bulletin* re the times of meetings, as per Rule 10, and further that the secretary report the meetings of this Association as held from time to time. A special subject paper upon the honey blooms of the district was then read by Mr J. S. Dick, which was discussed by the members, and Mr Dick thanked for his paper.

The appointment of a special subject for next meeting by the President concluded the business of the meeting, which was then closed.

POETIC PLAY ON LETTERS.

From the Mirror of Literature. Amusement, and Instruction, published in the year 1828.

Peerless, yet hapless Maid of Q !

Accomplished L. N. G.

Never again shall I and U

Together sup our T.

For, ah ! the Fates, I know not Y,

Sent midst the Flowers a B,

Which ven'mous stung her in the I

So that she could not C.

LN exclaimed, "Vile, spiteful B,

If ever I catch U

On jessamine, rosebud, or sweet P,

I'll change your stinging Q.

I'll send you, like a lamb or U,

Across the Atlantic C,

From our delightful village Q

To distant O. Y. E.

A stream runs from my wounded I,

Salt as the briny C ;

As rapid as the X or Y,

The O I O or D.

Then fare thee ill, insensate B !

Who stung, nor yet knew Y ;

Since not for wealthy Durham's C

Would I have lost my I.

They bear with tears fair L N G,

In funeral R A—

A clay-cold corpse now doomed to B,

Whilst I mourn her D K.

Ye nymphs of Q, then shun each B :

List to the reason Y—

For should a B C U at T,

He'll surely sting your I.

Now in a grave L deep in Q

She's cold as cold can B,

Whilst robins sing upon A U

Her dirge and L E G.

NEW ZEALAND FOUL BROOD ACT.

EXTRACTS FROM.

5. If in any locality where colonies of bees are kept within six miles of other domesticated bees there is reason to suspect that any such bees in such colonies are diseased, it shall be lawful for any two beekeepers to send in writing a notice to the owner of such colonies, and require him to satisfy them by any reasonable means that his bees are free from disease, or otherwise that he has taken measures to eradicate the disease by destroying the infected hives, bees and combs, or otherwise by treating them by one of the modes described in the First Schedule. A copy of such notice shall be forwarded at the same time by the complainants, accompanied by

their names and addresses to the nearest Magistrate.

6. On receipt of such notice the owner of such bees of which complaint has been made, shall forthwith take steps to satisfy the complainants by whom the notice was sent, either by allowing them to inspect the suspected bees, combs, and hives or by other reasonable means, that the said bees, combs, and hives are free from disease, or that he has taken the proper measures to eradicate the disease if the same exists.

7. If after the expiration of three days from receipt of the notice the keeper of the suspected colonies neglect to reply to the notice, or if, having replied, he fail to satisfy the senders of the notice as set forth in the preceding clause, it shall be lawful for them to complain in writing to the nearest Magistrate, reporting such neglect, a copy of such complaint being at the same time sent to the offending beekeeper ; and on receipt of such complaint the said Magistrate shall, without delay, instruct the constable to accompany the complainants, and with them to enter upon the premises of the offending beekeeper, and then and there to require him to open such hives and expose such combs as the said complainants may direct ; and in case of his refusal, to authorise the said complainants themselves to open and examine such hives and combs as they may deem necessary.

8. If after such inspection the said complainants shall be satisfied or suspect the existence of disease in all or any of the hives so inspected, the constable shall require the said beekeeper, or in case of his refusal, the said complainants, to cut out from each suspected hive a portion of comb not exceeding six inches square, and to place each portion or portions of comb in separate tin cases or boxes, marking the same with a legible mark corresponding to a mark placed upon the respective hives from which the portions of comb were taken, and then and there to seal such case or box, and to deliver the same thus packed and sealed to the constable for transmission to the nearest expert, together with a document signed and in the form set forth in the Second Schedule ; also, the cost of carriage, and the payment of the expert's fee as hereinafter provided for. Provided always that if the keeper of the infected bees shall, in the opinion of the complainants, take sufficient steps to destroy by fire the suspected hives, combs, and bees, then it shall be unnecessary to send the suspected combs to the bee expert, as above described.

10. If the offending beekeeper shall wilfully obstruct the carrying out of the instructions of the bee-expert, he shall be liable to a fine not exceeding twenty shillings for each infected hive.

11. The fee payable to the bee-expert for examination of one sample of comb shall be 5s., and for other samples sent from the same apiary

at the same time, one shilling for each additional sample.

12. In the case of any examination of suspected comb by the bee expert, his fee, and all costs attending such examination and incidental to the complaint, shall be payable by the complaining beekeepers, if the comb or combs be reported upon as free from contagious disease; but if found to be infected by disease, then such fee and costs shall be payable by the keeper of the diseased bees.

CANADIAN F. B. ACT.

1.—(1) The Ontario Beekeepers' Association shall at each annual meeting, or the directors of the said association shall, if in the interval between two annual meetings the occasion should arise, appoint an inspector of apiaries and a sub-inspector for the Province of Ontario, and the said inspector and sub-inspector shall be elected by the vote of the majority of the members of said association present at the annual meeting, or the vote of the majority of the directors as the case may be. Any annual meeting may delegate the annual appointment of an inspector and sub-inspector to the newly elected board of directors.

(2) The said sub-inspector may, when so directed, as hereinafter provided, perform all the duties and exercise all the powers in this Act directed to be performed or exercised by the inspector, and the provisions of this Act relating to the inspector shall be deemed to apply to and include the said sub-inspector.

(3) The inspector or sub-inspector on entering upon any premises in the discharge of his duties shall, if so required, produce the certificate of the president of the said association that he has been appointed as such inspector, or sub-inspector as the case may be.

2. The said inspector and sub-inspector shall hold office for one year from the date of the annual meeting at which they were appointed, or if they shall have been appointed by the directors, then until the next annual meeting after such appointment, and shall be eligible for re-election, but the said inspector or sub-inspector may at any time, subject to the approval of the Lieutenant-Governor in Council, be removed from office by the directors for neglect of duty or other sufficient cause, and in case of such removal the directors shall without delay appoint a successor.

3. The said inspector shall, whenever so directed by the president of the Ontario Beekeepers' Association, visit without unnecessary delay any locality in the Province of Ontario, and then examine any apiary or apiaries to which the said president may direct him and ascertain whether or not the disease known as "foul brood" exists in such apiary or apiaries; and whenever the said inspector shall be

satisfied of the existence of foul brood in its virulent or malignant type, it shall be the duty of the inspector to order all colonies so affected, together with the hives occupied by them, and the contents of such hives, and all tainted appurtenances that cannot be disinfected, to be immediately destroyed by fire under the personal direction and superintendence of the said inspector, and after inspecting infected hives or fixtures, or handling diseased bees, the inspector shall before leaving the premises or proceeding to any other apiary, thoroughly disinfect his own person and clothing, and shall see that any assistant or assistants with him have also thoroughly disinfected their persons and clothing, provided that where the inspector, who shall be the sole judge thereof, shall be satisfied that the disease exists, but only in milder types and in its incipient stages, and is being or may be treated successfully, and the inspector has reason to believe that it may be entirely cured, then the inspector may, in his discretion, omit to destroy, or order the destruction of the colonies and hives in which the disease exists.

4. The inspector shall have full power, in his discretion, to order any owner or possessor of bees dwelling in box hives, in apiaries where the disease exists (being mere boxes without frames) to transfer such bees to moveable frame hives within a specified time, and in default of such transfer, the inspector may destroy, or order the destruction of such box hives and the bees dwelling therein.

5. Should the owner or possessor of diseased colonies of bees or of any infected appliances for beekeeping, knowingly sell or barter, or give away such diseased colonies or infected appliances, he shall, on conviction before any justice of the peace, be liable to a fine of not less than 50 dollars or more than 100 dollars, or to imprisonment for any term not exceeding two months.

6. Should any person whose bees have been destroyed or treated for foul brood, sell or offer for sale, any bees, hives, or appurtenances of any kind, after such destruction or treatment, and before being authorised by the inspector so to do, or should he expose in his bee yard, or elsewhere, any infected comb, honey or other infected thing, or conceal the fact that said disease exists among his bees, he shall on conviction before a justice of the peace, be liable to a fine of not less than 20 dollars and not more than 50 dollars, or to imprisonment for a term not exceeding two months, and not less than one month.

7. Should any owner or possessor of bees refuse to allow the inspector or his assistant or assistants to freely examine said bees, or the premises in which they are kept, or should such owner or possessor refuse to destroy the infected bees and appurtenances, or permit them to be destroyed when so directed by the inspector, he may, on the complaint of the inspector, be sum-

moned before a justice of the peace, and, on conviction, shall be liable to a fine of not more than 50 dollars or less than 25 dollars for the first offence and not more than 100 dollars or less than 50 dollars for the second and every subsequent offences, and the said justice of the peace shall make an order directing the said owner or possessor forthwith to carry out the directions of the inspector.

8. Where an owner or possessor of bees shall disobey the directions of the said inspector or offer resistance to, or obstruct the said inspector a justice of the peace may, upon the complaint of the said inspector, cause a sufficient number of special constables to be sworn in and such special constables shall, under the directions of the inspector, proceed to the premises of such owner or possessor and assist the inspector to seize all the diseased and affected appurtenances and burn them forthwith, and if necessary the said inspector or constables may arrest the said owner or possessor and bring him before a justice of the peace to be dealt with according to the preceding section of this Act.

9. Before proceeding against any person before a justice of the peace, the said inspector shall read over to such person the provisions of this Act or shall cause a copy thereof to be delivered to such person.

10. Every beekeeper or other person who shall be aware of the existence of foul brood either in his own apiary or elsewhere shall immediately notify the president of the Ontario Beekeepers' Association of the existence of such disease, and in default of so doing shall on summary conviction before a justice of the peace be liable to a fine of five dollars and costs.

11. Upon receiving the notice in the preceding section mentioned or in any way becoming aware of the existence of foul brood in any locality, the said president shall immediately direct the said inspector to proceed to and inspect the infected premises; provided that when the person giving such notice is unknown to the president or there is reason to believe that the information in such notice is untrustworthy, or that the person giving such notice is actuated by improper motives, then the said president may require the person giving such notice to deposit the sum of 5 dollars with the president as a guarantee of good faith, before the said notice shall be acted upon, and if it shall be proved that the said notice was properly given, then the said deposit shall be returned to the person giving such notice, but otherwise the said deposit shall be forfeited to the use of the said Ontario Beekeepers' Association.

12. The said association shall include in its annual report to the Minister of Agriculture a statement of the inspector's work during the preceding year, which statement shall include the number of colonies destroyed by order of the inspector and the localities where found, and amount paid to him for his services and expenses for the preceding year.

13. The directors of the said association may from time to time make such by-laws and regulations for the control and guidance of the inspector in carrying out the provisions of this act, as they may deem necessary, and the said directors shall also by law fix the amount of remuneration of the said inspector and sub-inspector, but all such by-laws and regulations shall be subject to the approval of the Minister for Agriculture.

ARTIFICIAL SWARMING.

FROM THE SOUTHLAND QUEEN.

When you see that the bees are getting ting ready to swarm, or when they are jammed full of bees, and whitening up the combs near the top bars, you may know they are getting a little honey, and swarming will soon begin. Now go to all your strongest colonies first, and take an empty hive for each that is to be divided, and put in starters, or tull sheets of foundation, as you chose, but you had better use starters anyway, as so many beginners hive their swarms on frames entirely empty, and the bees go crossways, and then what a fix you are in. I had rather transfer bees out of an old log, than to transfer out of a framed hive after the bees have built crosswise as you cannot get out a single frame or get to the combs without tearing the hive up. So I will repeat, do not let your bees build crooked combs, if you are expecting any satisfaction or profit out of them. Well, when you have your hives ready, begin by taking out half of the frames, and those that have the most sealed brood in them, and place them in your new hive, all the time looking out for the queen, and be sure you find her. Let all the bees stay on the combs, and place the new hive off on a new stand, contract the entrance, and leave them alone until the 9th or 10th day. I will now carry you back to the old hive and have you fill it up with frames with starters in them, or better still frames of foundation. If you do not wish to go to the expense of full sheets of foundation, then just use starters, say not less than one inch wide, and this will always insure you nice straight combs. Well after you have

filled the old hive with frames you may close it up and go to the next and so on till all are divided that need it. Your old colony will have most all the old bees, and of course will build right up, and will not likely swarm and you will notice that the new colony will not work much for several days, but do not be alarmed at that, as the brood will soon hatch out and you will have a fine young colony of bees, with all their working lives before them, and their queens will hatch out and be ready to lay about the time the last bees are hatching. Now, I will tell you to look sharp that the newly made colonies do not swarm, as you cannot afford it if you are going to run that apiary for honey, as you must have your hives strong for your flow, or you will miss a crop, and I do not wish to do that. On the ninth or tenth day, better be the ninth, go to your new colonies, and remove all the cells, that they have started, except one the best looking one and I mean by the best looking one the longest and the best shaped cells, and be sure you get them all out but one or the bees will swarm sure if any honey is coming in at all, or if they have plenty in the hives, and such swarms will be the same as second swarms in natural swarming, as the young bees know nothing of the way you have manipulated things, and the first young queen that hatches will lead out a swarm, and leave your hive too weak. If you have any hives that you have divided, that is, or has better bees than some others, and you wish to breed from them, you might tear down all the cells of those you do not want and insert cells from those you like best, and by this means you will be keeping your bees up. When you take all the sealed brood away from the old parent colony, and give it to the new colony, you have the very same conditions that you would have in natural swarming, and beats natural swarming two to one if done in the right manner and at the right time.

CAPPINGS.

(From American and other Bee Journals)

All sorts, from the veterans with ragged wings to the babies that can hardly fly go out with swarms.

CALIFORNIAN HONEY CROP 1894. Mr D. A. Wheeler, of Riverside, from about 900 colonies gets nearly 50 tons; H. E. Wilder, with 120 colonies, gets 12 tons; M. Segars, of San Bernadino, from about 300 colonies gets 20 tons; these apiaries are making up the loss of 1893, and are doing much better upon honey production than in that year.

Mr. O. R. Coe:—One of the most important uses of the bee-escape, and one that I have never seen in print, is the use of it in keeping out fresh thin nectar the day we extract, by putting on a bee-escape early in the morning, and never at night, as usually told to do; then if there is any uncapped honey it will have been evaporated (or boiled down) by the bees during the night.

Mr. Hutchinson, says:—Foul Brood is not transmitted through the queen; at least, this seems to be the decision of all practical bee-keepers who have had to do with the disease. Cheshire claims to have found the spores of the disease in the ovaries of the queen, but I have yet to know of a case where the disease was communicated to a healthy colony by the introduction of a queen taken from a diseased colony. Mr McEvoy, the foul brood Inspector of Ontario, says that he has taken home a great many queens that have been removed from diseased colonies, and used them in his apiary, and never has disease been transmitted by this course.

J. B. Locken:—As is nearly always the case, the queen very seldom lays eggs in the top cells near the top-bar, but always leave a space where the bees usually store honey. As a result, that part of the comb, where all the weight comes, is the weakest, as it doesn't become tough, like the rest of the comb, by breeding. If the combs break down in moving, extracting, or handling, they



usually break near the top-bar, where the honey is stored. To prevent that difficulty I am quite confident that the use of a half or a third sheet of veneer foundation would remedy all the defects in that line. It would also keep the combs from sagging as much as they do with a full sheet of common foundation, and there would be no hindrance in cutting out queen-cells.

Ed Jolley, in *American Bee-Keeper*:—It is a generally conceded fact that bees will stand almost any degree of cold if well provisioned and kept dry. Reasoning thus, I put half my colonies in the dovetailed hives in 1893, and the only preparation I made was to see that they had plenty of honey, and put two empty supers or one empty hive body on top and an extra heavy cushion of chaff on top of the frames, leaving the outer walls of single thickness entirely unprotected After trying this experiment in the winter of 1893, I was perfectly satisfied with it, and last winter I worked it on all my hives and must say my wintering by this plan has been perfect; and when I say "perfect," I mean that 100 per cent. of my colonies came through the winter bright, healthy and strong, and ready for business.

Doolittle thus describes his method of shaking bees off the combs in *Gleanings*: "I place the projecting ends of the frame on the ends of the two middle fingers of each hand, and then with a quick upward stroke throw the ends of the frame against the ball or thick part of the hand at the base of the thumb. As the frame strikes the hand, let the hands give a sudden downward motion, which makes the shock still greater. As the frame strikes the fingers it is again thrown back against the hand, and so on until all or nearly all the bees are off. The principle is, that the bee is on its guard all the while to keep from falling off, thus holding on tenaciously so as not to be easily shaken off by any motion which tends to throw it down. By a sudden stopping of the upward and a quick downward motion, the bees are thrown off their guard and dislodged

from the comb in an upward direction." The editor of *Gleanings* adds in a footnote: "I sometimes practice your method; but more often I pick the frame up, grasping the projecting end of one end of the top bar; and, doubling my fist, I strike the top bar one sharp, quick blow at a point where there are no bees."

Canadian Beedom:—Many years ago, when I found any dead brood in a hive of bees, the first thought that came to my mind was to find out the cause of death, and how to prevent it. By a close examination of the condition of things in the brood-chambers, after the sudden shutting off of honey flows, and watching the effects of feeding bees at such times, or uncapping the sealed honey in the colonies so as to keep the bees well supplied with plenty of unsealed stores to feed the larvæ well, just the same as they always do when they are gathering and storing honey very fast—I soon discovered that brood often dies of starvation when the honey-flows are badly checked in the breeding season by frosts, very dry weather, or many days of rain. When these checks take place, the bees soon use up the unsealed stores, and then they won't uncapse the sealed honey fast enough to keep pace with the amount of brood that requires feeding just then; and then the result will be some starved brood, here and there, right in some of the strongest as well as in the very weakest, colonies. Some of the starved brood will be found on its back, and turned up a little in cells ready to cap or seal; in some of the capped cells a small pin-hole will be found in the capping of an odd cell where there is much of the brood starved. The starved brood in some cells will be *white* at first, and sunken down in a shapeless mass, and many of the small larvæ won't have a particle of food, and will look like little, shrivelled up worms in their cells. When the colonies have plenty of unsealed stores, the brood will always be found plump and very fat, and the most of the small larvæ will be almost floating in food.

G. W. Demaree, in *American Bee Journal* says:—During the very warm weather I discovered that one of my strongest colonies that had a set of Langstroth combs above the brood-nest, was becoming crowded for room, and being in a hurry about something, I lifted off the heavy super, and seeing the combs were ready for the extractor, I adjusted a case of empty combs in the place of the super removed, and on top of this was placed the bee-escape board, and the full case was *tiered* on the board in the usual way, and I went about my business, leaving the bees to pass down through the Porter escape at their leisure. I have done the same thing hundreds of times. Some hours afterwards I passed by the hive and chanced to lift the cover of the hive to see if the bees were moving down through the escape. It was a sight to see the plight of the crowded bees in the super. They were well nigh suffocated—black and dripping with moisture. They seemed to be asphyxiated, when the cover was first removed, but after a little airing they began to boil up over the edges of the super, dripping wet. The only thing I could do for them was to brush them gently from the combs in front of the hive, and leave them to the chances of recovery. This has taught me a lesson that I shall not soon forget. When using a bee-escape of any kind, the bees should have ventilation at the top of the case or super.

At a discussion at the Ontario Beekeepers' Convention on the decreasing prospects of success in honey raising, a Mr. Frith made the following remarks:—"Temperature has a good deal to do with the secretion of honey. So has the strength of the flower. Ten or fifteen years ago white clover was comparatively new. It was then strong and vigorous. Flowers, we learn from Professor Fletcher, have little, if any epidermis. They virtually have none. A very little unfavourable weather will, in the case of the wild mustard, destroy the secreting power of that flower. The same with our white clover. I can

remember when the flower was strong, and had no trouble in secreting any amount of honey. Alsike is not yet universally sown in this country. Mr. Pringle and others have sown it, but the soil is virgin for it still, and the flower has stronger secreting powers than it will have when it becomes more universally sown. Then, electricians say that the electric current is not so strong over the northern half of the earth as it used to be, and there is a direct relationship between the electricity in the atmosphere and the honey flow. If the northern lights are strong during one season we can count on thunderstorms the season following stronger than usual and the flow will be retarded. When we have a soft, mild, warm electric atmosphere, honey will secrete more rapidly. The circle of seasons will be complete again and we will have a period at no distant date when the honey flow will return and we will have so much of it we will not know what to do with it.

A curious theory concerning the utility of drones, which has been brought up before in *La Revue Internationale*, is reviewed by A. Zoubareff, a correspondent in Russia, apropos of an experience of Podolsky, a Russian bee-keeper, as follows: "After the flight of the bees in front of their hive, many drones may be seen so weak that they can scarcely spread their wings to fly away. After having examined more than a hundred to find the cause, M. Podolsky ascertained that they had all lost their copulative capacity, having their spermatophores withered up. To ascertain the cause of such a deformity, supposing they were impotent from birth, he opened with every precaution 98 cells of drones at the age of 20 days, drew them out and found that they all had enormous genital organs. Assured that his supposition was wrong, he commenced to examine the drones which sported with the workers, and found only seven to ten per cent. with organs in a normal state. Drones expelled from the hive by the bees or shelt

at the bottom had unsound organs. The cause of this deformity M. Podolsky lays to the workers, whose organs, though less developed than those of their mothers', do not cease to excite their instinct for the males, which is confirmed by the fact of laying workers. * * After having destroyed all male larvæ, he has found that the colony became visibly feeble, without energy or agility, and that it produced less brood and honey than with the presence of drones."

T. S. Pettitt gives his plan of getting bees off extracting combs:—First give a couple of smart whiffs of smoke in the entrance, then blow smoke smartly underneath the quilt and the bees will rush downwards, then remove the quilt or cloth and for a moment rush the bees down with smoke. Now is your opportunity; lift the combs out quickly and shake off what bees you can quickly and lean the combs against the back part of the hive or any other convenient thing, or place them in a light box for the purpose. Now, keep on a hustle, and as soon as the last frame is out, drop in and adjust your empty combs and close up the hive. Now, see, all this must be done before the reaction or return of the bees sets in, and your bees are still in good humour, and their zeal for gathering honey is not decreased by the presence of those empty combs, and everything is lovely. The process of brushing the remaining bees from the combs will be found pleasant and easy, for by this time they feel lost and lonely, and they are in no mood for self-defence. I had rather remove the filled combs and replace them with empty ones than adjust and remove a bee-escape. And then, I fancy that the bees being crowded in the brood-chamber and the consequent excitement caused by the bee-escape would work up swarming fever. I go right on with this work in the robbing season. I place the robber cloth over the comb box, and just when commencing operations I fill said box with smoke; this keeps the robbers at bay. At such seasons I have an assistant to keep the air over and about the hive pretty full of smoke."

J. A. Nash in *American Bee Journal* says:—Three or four years ago I was nailing hives near the apiary, and noticed a king-bird swooping through the cloud of bees that came dropping down at the fronts of the hives near by, heavily laden with the first honey of spring. My eyesight was good, and I was satisfied that the bird was catching bees, and the only bees to catch that early in the spring were workers. You see the result of the experiment years ago satisfied me that drones were the game which he was hunting, but this time there was no mistake, *sure*. Again the rifle came into service, and again a feathered "king" lost his crown. What was my amazement to find the crop of this bird entirely empty! Now I *knew* the little pirate had been robbing the "merchant vessels" of the apiary, but where was his plunder? I thought of Josh Billings' saying, that "Eney fule kood steel, but it took a wise chap to hide." Soon another kingbird perched on a convenient branch of a cherry-tree, and again the swooping tactics were exhibited—a rush and a return to his perch. This was kept up a long time, and I was about to fire at him when he ruffled his feathers, shook himself a little and ejected a mass of something from his mouth, which landed on a flat roof of a hive beneath. Then I fired and picked him up; a knife slit showed the crop practically empty, while on the hive cover was a mass of crushed worker bees much larger than I should have thought so small a bird could have held. Well, the mystery was solved; I had never fired at the right time before, it seems, and had only secured birds that were catching the honey laden drones as they were leaving the hive for an outing, or else had killed them after they had disgorged their prey. Since that time I have found them with their crops filled with dead bees, and have several times used them as moving targets as they caught bees on the clover bloom. I keep a gun handy to my work, and often kill a half dozen in one forenoon, as they are very plentiful here.

QUESTION NEXT MONTH.

45.—Does "Foul Brood" effect any but immature bees?

46.—Why do the bees always make the colour of the cappings of brood agree in colour with the comb? New comb light cappings, old comb dark cappings.

47.—Which is the most profitable to put in frames, starters or full foundation?

QUESTIONS.

42.—W. S. & H. J. Wilson.—Are drones raised from a drone-laying queen &c., as good as those raised from a fertilised queen?

43.—Are you feeding this spring, and if so, what plan have you adopted?

44.—What system do you adopt in taking your honey from the hive during a good season?

J. MCFARLANE.

I go over hives once a week or fortnight, according to how the honey is coming in, and remove all combs that are $\frac{3}{4}$ or more sealed, replacing them with empty combs at same operation. I have a tin lined box that holds 30 combs (L size) which I wheel into honey room to be extracted. These combs when emptied are exchanged for the full ones on next batch.

G. STREATFIELD.

Permit me to say first what I don't do. I never take from the hive, or extract any honey, the cells of which are not capped, because I believe such honey is not as rich in flavour as the capped celled honey is. When about to take honey from the hive I have several frames with starters of any size I may think most suitable ready prepared, or better still some frames of good clean comb, either full or partly filled, left from last season, which I keep on hand. With these in one box and an empty one with me I go to the first stock, and take from it such frames as are full and therefore fit to extract from, these I place in the empty box, and carefully cover to keep the bees from lighting on the combs. Having taken out those frames which are ready, I replace them with the frames with starters or the frames with comb in them, cover up the box again and leave the bees to again set their house in order. I find that replacing the frames at once saves a lot of irritation and also saves re-opening the boxes, and the bees soon settle to work again. If the extractor is at work while I am proceeding with the taking of honey the extracted combs replace those which are taken from the succeeding boxes. Our great difficulty in this locality, a cold one, is to extract, not to take the honey.

C. A. C. WILSON.

44.—During a good season the system (or lack of system) we adopt in taking honey—is simply to grab it as fast as we can. Supers are all on, we go through from No. 1 to the end—day by day. If there are 1 or 2 filled and sealed combs in a super, out they come and empty combs put in their place there and then without waiting for extracting. Of course the extractor is going all the time we can give to it. If we get regularly run up and the bees winning in a canter we stick on another second super here and there and let them wait for quieter time, or till we can get breath. This sort of thing unfortunately doesn't obtain every season. In the off seasons we just get what little we can, and try to be thankful. In all seasons however we take care to leave ample stores for bees to winter on. Say not less than 25lbs. We don't believe in opening our hives in cold weather to put in feed and cold air simultaneously.

H. RUSSELL.

42.—As there never is any scarcity of drones, I don't see it is of any consequence to us either way, but I should think that as the queen is capable of producing drones without fertilization and that such drones are, to all appearance both in size and vigour equal to those from a fertilized queen, they are equal in other respects. This question gives rise to another one. Are drones from a fertile worker as good as those from a drone laying queen? I don't think so.

43.—I never feed in the spring, nor at any other time. I always allow my bees all they will store in the brood nest and find it quite sufficient to winter on and swarm well on in the spring.

B. R. DOYLE.

43.—As far as purity goes I say yes, I should prefer to have drones from eggs laid by a fertilized queen. I always set apart my best tested colonies queens, tested for utility and prolificness, and progeny for work and energy, same with drone comb.

43.—Have no occasion to feed this spring. Were I to do so would use flat tin pans about $\frac{1}{2}$ an inch deep on top of frames, and cover same with a piece of netting or cheese cloth. For food I would use diluted honey or sugar syrup made as described in A.B.C. of Bee Culture.

G. R. HUMBLE.

43.—Feeding individual colonies for experimental or specific purposes may be advisable at times, but the beekeeper who has to feed his apiary as a general rule is in a very bad way, with honey at 3d per lb carriage paid for 50 miles. NO, I don't feed, any more than I grow cabbages in the Great Sahara Desert. Feeding is a nuisance, the only remedy for which is to pack up and remove it to a more favoured district, or sell out and abandon the pursuit before the pursuit abandons you.

42.—I am prepared to fall down and worship at the feet of the possessor of the necessary practical experience to prove it affirmately and negatively. The question—apart from the answer, is however instructive to me, as it assumes a fact of which I was in ignorance, namely, that drone raised from an unfertilized queen are at least virile enough to perpetuate their species.

A priori—one could scarcely think so for given an unfertilized drone layer and sufficient workers, in a droneless region, the former would become fertilized by her own drones, and the species thus be normally continued by coition between a parthenogenetically raised drone and the virgin mother that gave him parthenogenetical birth. Is there any analogy in nature to this, or do I betray colossal ignorance?

HUGH RUSSELL.

My home apiary consists of 200 hives arranged in a double row, with honey house in the middle. Tram line running from one end of shed, through honey house to other end of the other shed. I use two story hives and in cases of very strong colonies three story hives. The frames are taken from top boxes four at a time. After shaking and brushing the bees off are loaded into trolley and run into honey house, where they are at once uncapped, and extracted in a Stanley Automatic four frame extractor, loaded back on to the trolley and returned to their respective hives. This goes on all summer during our good years and it takes me about 14 or 17 days to get round my bees. My sheds stand north and south, and the hives stand east and west, and I find no difference in the yield from either side.

A. J. BROWN.

42.—No, not in my opinion, as I consider the drone progeny of any queen is influenced by her mating. And I would not allow a possibility of young queens and drones from the one mother meeting.

43.—No, quite the contrary, my bees wintered well, stored pollen and honey all through, and are now strong and storing fast from fruit bloom.

W. E. BAGOT.

44.—Why, taking honey in a good season is as simple as falling off a log, in just such a season as we had last autumn. Of course your supers must be all sealed up, and your wheelbarrow a large one. You simply give a few good whiffs of smoke down through the frames and all but a few bees will clear to the bottom chamber in search of uncapped honey, then smartly pry off super and replace with one already full of empty combs. Next hive ditto, and so on. Next question is to sell it.

G. W. GORDON.

44. This question, like most other things in beekeeping, cannot be answered by any direct rule; different conditions different methods. The plan I generally adopt is as follows:—My hives are the Gallup. I put on the half story, and when frames are nearly all capped over I

raise it and place another half story in between. In a few days when the bees are working well in the centre half story, I put an escape board between the two half stories in the evening. Next morning I lift the top story off, which is clear from bees, take it into the honey room and extract. I then take it back and place it in the centre and keep on alternately changing and extracting. When busy with other farm work I tier up if the honey is flowing very fast. I am a trifle doubtful of tiering up this spring. Of course I confine the queen to the lower chamber.

J. T. ADAMS.

44. Up to the present time I have always used a brush, or rather wing, for my bee brush is mostly the wing of a bird, the larger the better I like them. Formula—Smoker in full go, two comb baskets, a big knife, my wing dipped in water (it never irritates the bees when damp), my knife is an old broken butcher's siding knife. I did not buy it for this, but I would not have got a better thing if I had looked for it, it being long, thin and strong. When frames are fast to cover I can shove it through over four or five frames, give it a twist and off they come without any jarring perceptible. A whiff of smoke at the entrance and another under the lid is all I use, unless they are fightable; lift out frames, shake, give a couple of sweeps with wet wing till empty, then to the extractor and back; put in your combs and pass on to the next.

WM. SHAW.

44. My hives are not more than ten or twelve yards from the extracting room; consequently I experience very little inconvenience. I have to extract whenever I can find time, which is generally in the evening. I use a few ordinary boxes, about the length of the frames, into which the frames of honey are placed as taken from the hive. In like manner these frames when extracted are placed in the boxes and returned to the hives, which is generally in the evening, as such has a tendency to keep down robbing.

WM. D. RUSSELL.

44. My method of extracting is simplicity itself. I use three story hives, ten frames in bottom, and middle boxes filled with worker comb only. Then as soon as honey flow is on I remove (about once a week) the frames from the top story, placing them in carrying boxes which are carried to the extracting house, uncapped and extracted. I then return these frames to the middle story of the same hive after having removed in the same way its frames. These then are carried to the extractor and extracted and returned to top box; but if queen should be laying in middle story, as she often is, I return frames then to middle story. The work is done on a two frame Novice extractor, and with the help of one young fellow I can extract half a ton in 8 hours. The bottom story is always jam full of brood to the top bars.

H. V. WEETA WAA.

44. For extracted honey I use Root-Hoffmann shallow frames, and remove the supers when the honey is capped. If the flow is heavy I usually remove my supers about every seven days. When I remove a filled super I place it on end at rear of its hive; a few whiffs of smoke and the bees are gone. Supers of sections are treated the same way; those not properly filled are returned with empties to the hive. I find that $\frac{1}{2}$ depth frames are much handier than full depth frames. Too much looking into brood chamber is not a success when honey is coming in. Keep a good queen in hive and the bees will not have much room to store honey. I do not extract from brood chamber. My queens keep the combs banked out with brood.

EDWARD BEATTIE.

44. The plan I have practised this last two or three seasons is this:—I have a little square stool made—high enough to be on a dead level with top of brood chamber—with strips of frame stuff nailed around the outside to prevent squeezing bees when top box is placed on it. I now proceed to hive that is ready to rob and place the stool behind the hive, remove the lid and give a few sharp puffs of smoke on top of frames to drive as many bees down as possible out of top box. In a minute or two I lift off top box and place on stool, instantly removing lid, and place on brood chamber, now with frame cart close handy take out the combs singly, shake the combs in front of hive, removing remainder with a bee brush, and place in comb cart. When the cart is full gather up empty boxes and place on top; wheel all into extracting room, stow the boxes in some corner out of the way, and go on extracting, knocking off just in time to fix the frames in empty boxes and return to their hives just after sunset. By adopting this plan you leave no temptation exposed to robbers, and I think avoid a good bit of this stinging business. My cart is made large enough to hold some thirty frames, and for a lid I have some very strong bed ticking material closely tacked on one side and a strip of hard wood tacked on the other side full length of cart. The cover should be cut a little too long, and about five inches too wide. This makes a very light cover, and when bees are hovering around trying to get in the cover can be raised quickly with one hand and comb placed in with the other. A quick slam down and the weighted side holds the cover down tight so as no bees can get in.

VISITING.

In a light sulky, drawn by a nimble footed pony, we started from home at eight o'clock in the morning. Through the town of East Maitland, to the top of the hill on which it is situated, and

which commands a magnificent panoramic view of a portion of the valley of the Hunter with the towns of E. and W. Maitland, Largs, a vast area of beautiful cultivated land, dotted with farm houses, and the scene bounded in all directions by timber-covered hills. Over the five or six rough stony hills that occupy the next seven miles, on which grow stringy bark, iron bark, bastard box, red gum, apple and other trees, the creek banks abounding with wattle; and near the end of the distance some very pretty forest and road scenery. At the township of Tarro, the site of a deserted colliery, we turn away to the right. The road here is comparatively level, the land partially cultivated, but further a dense scrubby bush. At the distance of about a mile we came to the farm of Mr. Williamson. His son is an enthusiastic beekeeper. He told us however he had been unfortunate. Last autumn he had 53 swarms, now they had dwindled down to 24. From a neighbour he had purchased eggs of an imported yellow queen. From them he reared eight queens, which apparently did well at first, but were the first to succumb to the disease whatever it was. There had been exceptionally sharp frosts during the winter, and since then extensive bush fires in the immediate neighbourhood must have had the effect of cutting off the food supply of a good many birds and reptiles, who possibly might have gone for the worker bees, the brighter ones commanding their attention first. It was not starvation the bees died from as there was plenty of honey in the combs. He commenced with using Munday frames, but has since adopted a narrow topped frame. He makes his own hives and frames. Some four miles further on the same road live quite a nest of beekeepers, the Messrs R. A. & H. A. Taylor, Mr. C. Ayerst and Mr. Osborne. Each of these complained bitterly of their losses during the past winter, over two-thirds of their hives being now empty. The bees had died in the hives lying in heaps at the

bottom. Mr Ayerst said painkiller had given a temporary relief. He had sent several of the bees to the Agricultural Department, but they could not detect the cause of death. He had read all the different authors he could come across on the subject of bee paralysis; the disease was well described, but no reliable cures given. He considered what was wanted from Government was a scientific man to make bee diseases a special study and to be at the service of beekeepers. Mr Osborn told us his two best hives now were two he had not extracted from last summer. They had swarmed out and had not gathered sufficient honey, so were let alone. A large swamp, some sixteen square miles, now dry for the first time for several years, is handy to all the bees of these apiaries.—On we went, through the mining townships of Minmi and West Wallsend, past the Young Wallsend Colliery, to the township of Barnsley, passing remains of numerous bush fires and occasional ironbark trees in bloom, on which the bees were working in swarms. A sure sign of honey being about were the numerous parrots flitting about in the trees. We ultimately arrived at Mr Longworth's apiary, consisting of 54 swarms in eight-frame Langstroth hives, well bred bees, he preferring dark leathers to any others. Five, side by side, in the front row, were suffering from paralysis. He was treating them with Little's Soluble Phenyle. As the ground is all sand the dead bees in front are easily disposed of by digging it up with a knife. A good part of last year's crop consisted of red gum, a dark honey with not a first class flavour. He has the satisfaction of knowing it will not bloom again for several years. While conversing at the tea table the subject of his most prosperous hives came up, and special allusion was made to one which he termed Mrs M'Intyre, from the person from whom the queen was obtained, and to several others, as being the strongest and as having given the best returns in his yard. Conversation then turned on the old methods of beekeeping and the freedom from disease under such. This

led on to the porousness of the old skep, and the advantage or otherwise of painting of hives. He said he had several hives in his yard not painted, and suggested an immediate adjournment to see if they were anyway different to others. Strange to say they turned out to be the very hives he had been praising up.—Next morning, in company with our host, we started for Mr J. E. Smith's apiary, four miles away. We walked, as we were told it was impossible to take a light vehicle along the road, it was so bad in places. Of this we became fully satisfied as we proceeded. We passed several free selections before we arrived at our destination. There were a great number of flooded gum trees in bloom, and the bees were working on them most industriously. It is a tree with a clean dapple and white barrel from bottom to top, more white than dapple, and it generally grows in marshy ground. On the hills where the selections are the soil is very poor and there was little cultivation. One man had gone in for pig rearing, but having to buy to feed them had given it best. We passed the remains of a house that having possessed a bark roof had succumbed in the late bush fires. Mr Smith has only been a few months in his selection, and works in a coal pit three miles away, yet his fencing was complete, a comfortable residence erected, a good honey house, his 130 hives doubled down to 100 to have them all strong, and several acres ploughed and planted with fruit trees. If industry deserves reward then that of Mr Smith does most richly so. After partaking of refreshments most welcome and kindly supplied by Mrs Smith and her mother, we retraced our steps, coming back part of the way through very dense scrub and over some stiff hills.—Before finally reaching our own home we paid a visit to our out apiary, to which we had not been for a fortnight. Several hives that had then shown signs of paralysis, and been treated with sulphur, were now quite healthy. All the others were in fair spring condition. One old queen had disappeared but two queen cells were well on to tak

her place. A queen cell nearly capped we had discovered in a strong hive on Sept. 16. and in consequence artificially swarmed the hive,—the young queen was now laying away vigorously—the first of the season. The removed hive was also doing well. Iron bark was in bloom but more rain was wanting to bring in clover and other bloom.

Descending the East Maitland Hill we missed a number of hives near its summit that belonged to Mr. Noad. On enquiry we found that out of seventeen he had last year, he had only two left, which he had sent away to a better location. He had lost his hives no doubt on account of the cold westerly winds to which his bees were fully exposed. He spoke of one Tuesday in particular as impossible for bees who had gone out to reach their home again.

A few days afterwards we visited Mr Robinson's apiary at New Lambton. He and his sons are both coal miners, but work has been very slack, so he has taken up an allotment of three acres, on a 21 years' lease, and it is now well under cultivation. He only lost three swarms out of 33 during the last winter—that was with paralysis. The others are all apparently very healthy. He scarcely opened his hives during the winter.

THE BLOSSOMING OF THE EUCALYPTUS.

Its influence on the product of the honey-bee from a commercial standpoint. "On the above subject Mr. D. R. McConnel, a beekeeper of great experience, delivered a valuable address before the members and friends of the Royal Geographical Society of Queensland. The following is a summarised account of the address:—"Mr. McConnel said "that perhaps in no part of the world is the native flora characterised by so abundant a secretion of honey as in Australia. He mentioned the capriciousness of the blossoming of the Eucalyptus, which was extremely disconcerting to the apiarist. In wet seasons they would scarcely blossom at all, but the drier and hotter the season the more abundantly they flowered, consequently yielding a great supply of honey. Besides the irregularity of seasons, eucalyptus

vary exceedingly in the normal time of flowering according to the individual kinds. Usually the spotted gum flowers in mid-winter; blue gum, August; red ironbark, September; silver leaved ironbark, December; grey ironbark sometimes in December; bloodwood about March; and so on through the numerous kinds of species, but vary according to their position from the coast. In Southern Queensland he considered blue gum and bloodwood the most constant as to the flowering time of year. Ti-trees are very rich in honey, the finest quality being obtained from the river beds and water courses. The swamp varieties had an abundance of honey, but it was objectionable on account of its rankness. The swamp-mahogany, apple-trees and sugary gums were all good honey yielders. In his experience the brightest and finest eucalyptus honey came from grey, broad and silver leaved ironbarks. The bees appeared to prefer the latter. He found that the honey obtained from blackbutt did not candy even if kept for years, and was of extreme density, but was very difficult to extract. In none of the honeys of the eucalyptus could he detect the flavour of the oil secreted by the leaves, and he doubted the medicinal qualities which some people entertain with reference to this kind of honey. Coming to the commercial aspect of the honey industry, Mr. McConnel quoted from an article which appeared in the *Brisbane Courier* recently from their London correspondent, in which that writer voices the opinion of an agent, who described the flavour of the honey sent from Queensland as "a peculiar burnt treacly sort of taste, as if the bees had fed upon the refuse of sugar refineries." This idea Mr. McConnel strongly deprecated, and said the only sugar refinery in Queensland was established quite recently, and stated that no honey was gathered for export in the neighbourhood or within miles of it. It was merely the dodgery of disreputable mercantile tactics. Those who were in the habit of using Queensland honey well knew that the above description did not apply to it. In conclusion, he said, the best steps to take to eradicate this false impression and do justice to our magnificent product will be devised only by those who know the home markets. Something might be done by proper inspection and grading, which could only be arrived at when the usual selfishness of individual producers gave way before a desire to work for the common good of brother beekeepers. Something might be done, too, by our colonial agents and friends in England. By whatever means arrived at, the placing of Queensland honey on a home market no longer ruled by prejudice would open a most important source of wealth to beekeepers in this country, and would be an invaluable assistance to many struggling settlers in their first difficulties of the occupation of the land.

At the conclusion of the address a discussion

took place, many of our prominent beekeepers warmly eulogising Mr. McConnel for his interesting and valuable paper, and expressed a wish that it would be printed and widely circulated as many of the points treated on were of vital importance to beekeepers generally.

THE ADVANCEMENT OF APICULTURE.

A. C. CUSACK.

It may not be time wasted to attempt as a slight guide to our work in the apiary, a rough forecast as to the future development of apiculture, and along what lines it will probably advance. The subject may for convenience be roughly placed under two headings, hives and all mechanical appliances used in connection with the apiary, the handling, management and improvement of the bees as a race. It is with the last clause of the latter subject that I intend to chiefly deal in this article.

Apiculture as a science has practically sprung into existence only within the present generation, and great as have been the improvements and discoveries made in that period, they will probably be equalled, if not surpassed in the next. What at present we consider as the acme of perfection, will within the next generation probably be relegated to the limbo of antiquated ideas. Though it is unlikely that as great an advance will be made in the mechanical department of apiculture, as in the improvement of our bees as a race. When we take into consideration the wonderful improvements that breeders have made in all classes of our domesticated stock, in many cases almost changing the species so as to better adapt them for the use of man, analogy would lead us to believe that similar improvements can be made in our bees, and it lies within the power of every apiarist, no matter whether his hives be few or many, to assist towards this desired end. By following the physiological laws of animal life, by breeding from those which show any superior qualities in the apiary, and by the judicious crossing of different races, much can undoubtedly be done to improve our bees. One great advantage the beekeeper has over the breeders of our domesticated stock, and that is, whereas it takes the stock breeder several years before he can form an opinion of the value of the progeny of his stock, the apiarist can tell the value of his within as many months, though the power of attaining this quick result has this disadvantage that it is apt to be injuriously used by the careless and impatient apiarist. With the increase of apiaries and the closer study of our bees, slight differences in the qualities of the race which are now overlooked will be noted, and these good qualities are perpetuated by breeding therefrom, though this increase

of large apiaries will probably bring with it the attendant diseases that generally follow the aggregation of large numbers of animals together in one place; but I have no doubt that remedies will be found to cope with these evils as they arise. When breeding or importing bees from another climate, it must always be borne in mind, that bees that may be adapted and prove suitable for one climate may not be so for another. Neglect of this has often led the apiarist to condemn as worthless the bees which he has imported from another locality, when he is himself at fault in expecting them to thrive under adverse climatic conditions.

In these colonies, with our great range of latitude, variation in altitude and meteorological conditions, the bee which gives the best results in one locality may prove unsuitable for another.

Many apiarists think that because a bee is imported therefore it must be superior to those already in the colonies. Whilst not for a moment underrating the value of imported stock, still, indiscriminate importation is as likely to deteriorate our stock as improve them. Apiarists are too prone to breed for colour, it being, unfortunately, the only test we have as to a bee's purity, but at the same time they should think more of the intrinsic worth of the bee as a honey gatherer.

The present mania seems to be for imported American stock. Though considering them superior to queens raised in Italy, yet those from the Eastern States have one defect which would not occur in those bred from climates similar to our own. In the North Eastern States of America for several months in the winter the bees and queen hibernate and cease from all active exercise. This proves of great advantage to the apiarist there as the bees thereby have a large stock of unused vitality to start work when the spring opens. This lying dormant in winter time will become hereditary and inbred amongst the race, as those which possess this quality have a better chance of surviving the severe winters. We know that all animals have the power of gradually adapting themselves to the changed conditions of their environment, provided the change is not too sudden. Now these qualities which prove advantageous to the American apiarist has the opposite effect here, as over the greater part of Australia the bees can fly almost any day through the winter. Then we want queens that will lay through the winter as well as summer, for if the workers keep flying through the winter, and there are no young bees hatching out to replace them as they die off, the stock will become too weak by spring time to be of much value as honey gatherers for the ensuing summer. I believe to this want of hatching brood may be attributed a great deal of what is called spring dwindling. Careful observation through a number of years in a large apiary has convinced me (of course I am only speaking of my immediate locality) that the hives whose

queens lay well through the winter, other things being equal, will give by far the best results by the end of the season. Our motto literally wants to be, "Always keep the hives strong." The apiarist who will tell us how to do this, will solve one of the most difficult problems we have to face.

It is probable that we will find in the races of bees that inhabit the warmer latitudes, or in some crosses of these with other races, the bee best adapted for the greater part of the climate of Australia, though so far as I have tried these races, they do not give such satisfactory results as the Italian. This may, however be partly due to the former not having had the same amount of care and attention bestowed on them, as they are comparatively speaking new races, and we have not yet tried them sufficiently to form a correct opinion as to their qualities. It is generally acknowledged that either plants or animals transplanted from a cold to a warmer climate they are more vigorous than when moved from a similar climate. This may in a slight measure mitigate against stock imported from climates similar to our own. It is with considerable diffidence that I take upon myself to criticise the work of our professional queen breeders. I am fully aware that we are indebted to them for their enterprise in importing many new races of bees which would not have otherwise have reached these colonies for some years to come. Still in many cases they deteriorate the bee as a honey gatherer instead of improving it. Their chief object, is practically, to produce the bee as pure in colour as possible to its parent stock, the other qualities being of secondary consideration. The professional queen breeder having many impatient customers waiting for their orders to be filled, cannot give the time to thoroughly test the queens he rears, he also raises queens from immature stock and in and out of season. A queen ought to have gone through the vicissitudes of a whole year's work, summer and winter, before we can form a correct opinion as to the value of her progeny, though I am afraid that this is too much to expect from the generality of apiarists. Though it will never be possible to produce an absolutely perfect bee, still we can all contribute our mite towards improving the race.

AUSTRALIAN HONEY IN ENGLAND.

Mr John Smith, of Mount Cotton, Q., has sent us the following extracts from English correspondence, which ought to be flattering, not only to him but Australian honey raisers generally:—

Mr T. B. Blow.—"I must say the sample I had from your agent was really fine honey indeed."

From a Yorkshire newspaper, we believe a lady writer:—"My next paragraph shall be really sequential. I have just received from a Yorkshire gentleman—Mr John Smith, settled at Montrose Park, Mount Cotton, Queensland—a big jar of most delicious Eucalyptus honey, and as I know that Mr. Smith is a diligent reader of this paper I take this method of thanking him for a charming gift."

Another newspaper writer, a Mr Muir—one of the best judges of honey in England, and a well-known writer on all subjects pertaining to fruit-trees, flowers, horticulture, &c., says:—"Many of my readers are interested in the letters published from Mr J. Smith, Montrose Park Apiary, Queensland, on bees, &c. I am of opinion that country is fortunate in having such an energetic bee advocate, and Mr Smith is undoubtedly improving the honey of Queensland. Some years ago I received a sample of his honey, which was very dark in colour and somewhat peculiar in flavour. The other day I received another sample through Mr Smith's agent in England, and this is a great improvement on the former. It possesses the true and valuable 'Eucalyptus' flavour, is of excellent texture, and very pure. It is superior to many samples of English honey I have seen at the shows or in the market, and I congratulate Mr. Smith on accomplishing so much in improving the honey of Queensland."

Quite a number of people have written us saying that they had received queens alive from America.

The Americans are booming crimson clover. It is a splendid honey producer, and a capital fodder plant. It is sown in Autumn, lasts but the one season, and wonderfully improves the soil—so say the correspondents of the American bee journals. A. I. Root says—"If it succeeds, you have a great lot of feed very early in the spring, and if you wish to enrich the ground for some future crop you have a great growth of clover to turn under. When it succeeds, this latter plan is probably the cheapest way of manuring your ground that has ever been devised. I say *manuring*, for a heavy growth of this clover, or, in fact, any clover, turned under just before planting your crop, is equivalent to a great many loads of the very best stable manure. Another thing, you do not get a great lot of weed seeds as where your manure is purchased."

We will be glad to receive samples of supposed adulterated honey, with particulars from where bought. This latter of course will be strictly private.

We acknowledge receipt from the Department of Agriculture of New South Wales of work just issued by them entitled "Crown Lands open or about to be declared open for selection under the Crown Lands Acts within the Land Board District of Maitland." It gives some 900 areas open for such selection, giving the county, parish, area, the minimum and maximum number of acres that may be taken up, price per acre under residential conditions distance from nearest railway station or postal road, character of land, soil, timber, &c., water supply, &c. Any one in a position as regards having quantity of hives, &c., to take up land for bee-farming, will find this publication invaluable.

QUEENSLAND NOTES.

A. F. BURBANK.

We had a pretty good honey flow all through the past winter in this district, and it is improving as the season advances. The bees don't seem much inclined to swarm this season, but are storing surplus instead. Honey is selling at 1½d to 2d per lb. wholesale in Brisbane at present. The winter and early spring has been very dry; we had a nice thunder shower yesterday (September 17th), which is the first rain of any consequence for nearly five months. It will freshen the forest trees up a bit, and should increase the honey flow. I have extracted nineteen 60lb. tins of honey, and got about 22lbs. of wax from cappings this spring. Stringy bark, grey iron bark, grey, red and white gum trees are loaded with buds. The blue gums and red iron bark have been giving a good yield of honey lately. I extracted from a long idea hive 65lbs. and from the best two-storied ten-frame hive 80lbs. of honey this season. It is now just two years since I became a subscriber to the A.B.B.

All numbers have come to hand safely, and they are full of useful information. It also gives one an idea what beekeepers in other places are doing, and keeps us up with the times. No apiarist should be without it.

I am glad to see that the committee of the N.B.K.A. of N.S.W. is bringing forward a bill to deal with diseases of bees. I notice that some who claim to be apiarists are trying to find a black side to the question. I expect most of the grumbling comes from careless beekeepers.

SPECIAL NOTICE.

IN about a fortnight's time a SPECIAL EDITION of the *A. Bee Bulletin* will be issued, to PAID-UP SUBSCRIBERS ONLY. It will contain copy of proposed, and considerably modified, Foul Brood Act, and a long communication from Mr H. R. Whittell re same and other matters.

J. D., Bowenfels,—I am sending you three pieces of comb, if you kindly let me know if it is chilled brood or whether it is foul brood. The larvæ of seven days old is as white as snow. The bees half capped the cell and then leave it. The queen lays two and three eggs in the cell and got an empty frame besides.

(The matter to hand. It is undoubtedly foul brood. Both by the colour and the drawing out of the affected matter. The proper course of cure is to cut out all brood comb and burn it. Put the bees into a fresh hive with starters. Place a queen excluding zinc at the entrance, so that if the bees should be dissatisfied with the new hive they will not swarm away. Or you might try this: Cut out and burn all the affected comb and disinfect comb and hive with Little's Soluble Phenyle. This is not a poison like carbolic acid. It is sold by chemists at 1/- per bottle. A teaspoonful of the Phenyle will be sufficient for a quart of water. Sweeten with honey. The bees, we believe, will then eat it, though we have not tried it. Watch the hive well, and if it breaks out again will be time to adopt the first plan.

Mr C. Smith has taken 105 colonies of bees from South Australia to Western Australia. May every success attend his enterprise.

Phacelia, a member of the family of Hydrophyllae, is being cultivated by the beekeepers of Saxony, Europe, for its special value as a honey plant.

R. H. J., Moss Vale.—We are having a very late spring, too much cold winds. In looking over my bees I found one colony queenless, and a laying worker I caged a laying queen over hatching brood, and now she is laying away bright. I use perforated zinc in preference to wire gauze for queen cages and all protectors as it is less trouble to work, keeps nice and bright and clean, and less likely to get out of shape.

T. H., Wagga Wagga.—The Albury apiarists and the Junee apiarists are sending honey to Wagga, also one from Goulburn, and I am protectionist enough to wish to keep my own market, but I am going to keep it by producing a better article, and by putting it up in a more attractive form, and I want you to help me by printing attractive labels. Send them along at once, for I have been extracting to-day and got 300 lbs of honey. It is a little darker than last year but of good density.

W. E. Bagot, writes,—In reply to foot note in your last re class interests, you quite misunderstood me. Perhaps it would have been more explicit if I had said "in the interests of beekeepers in general," and it was in no way disparaging to A.B.B., as I have always found it open to hear both sides of any question and trust that it will always maintain the interests of that class of the community known as beekeepers, against Government billet hunters and other humbugs. I would also mention in reply to the first part of your footnote that I am a quiet member of the N.B.K.A. and am calmly waiting to reap the benefits of Association.

[Thanks for your reply. It is very satisfactory.—ED.]

Mr. H. V. Mc. Weetawaa, writes.—I am pleased to see the improvement you are making in the *Bee Bulletin*. Its pages are full of sound and deep reading—especially Mr. R. Helms papers.—I noticed several of your readers (at different times) complain of being troubled with ants. If they will try the "Scrub Kill Co's Destructant," they will soon get rid of ants. By writing to the Coy., at Victoria Arcade, Sydney, all particulars will be supplied. Honey is coming in fast, the last rain has brought on the bloom very nice. I am trying a long idea hive this season, also have one hive holding 30 frames $\frac{3}{4}$ L, and from the way the queen is laying I think more than half will be solid brood.

A BEEKEEPER'S TROUBLES.—Received yours on the 13th., October last just one month after you sent it. The reason for that is that my mail has to be left at Tenterfield. Some time ago the squatter on whose run I have selected refused me permission to have my mails brought in his bag, since then I have to go to Tenterfield, a distance of 42 miles. Last week, a selector on the N.S.W. side of the border was in town and he fetched my mail for me. I live on the Queensland side of the border and there has not been a mail granted for this place yet and to send a letter safely I have to go nine miles to reach N.S.W. mail.

T. W. H., Lismore, R.R., writes under date Oct. 10—Very little new honey has been obtained here yet. Considering the time of year bees are very backward, but taking into consideration the unprecedented spell of dry weather, this is not to be wondered at. Those of us who are inland look to the clover for an early crop, but it is only the past few weeks that the bees made any show, and the little it has yielded is only sufficient for breeding. If the weather sets in hot and dry we will not get any clover honey. Swarms are now on the move, principally blacks from the bush. My first, an Italian, issued on October 1, and com-

pared with last year the season is quite three weeks late. I was afraid, judging from indications, or is it the lack of indications, the season will be an indifferent one.

A. E. H., Wanganui, writes.—I had 400 colonies in Waikato, but have recently shifted my quarters, fetching 120 colonies and 80 empty hives—all Langstroth. I brought the hives 90 miles by rail and 250 by steamer, the only loss being a few broken combs. Last winter I took a bicycle ride of 1100 miles round New Zealand. I hope to do Australia some future winter. Should you, Mr. Editor, care to publish the above notes, you are at liberty to do so.

[Of course we publish them, and are glad to get a little more such.]

H. C., Gosford.—A few lines to let you know how we are doing around here. Well, we have had a very cold dry winter, the coldest ever known, so the old hands about say, and I believe them. Last autumn I had five good strong colonies of Italians and one real boomer of a Carni-Italian. At the beginning of winter I left all any amount of stores, and in all but one the $\frac{1}{2}$ supers full. I had a look a few weeks ago, all were strong, but the half supers empty. Well, to-day I got a grand swarm from an Italian queen I got last year, hive full bees, eggs and honey. All other Italians look flourishing, but the poor boomed up early spring workers, the Carni-Italians, very sad. Mind I am only a new hand and my bees were run this winter on the "survival of the fittest lines." Those prove to be the Ligurians. Ti-tree is out and all but fruit blossoms that the bees can get. When the bees came out, I caught the queen, bees meantime had clustered. I then got a fresh hive, gave a few frames of empty brood, comb honey and put the queen in, shifting the hive the swarm came from, and in a very few minutes all hands were back again. Clipped queens certainly facilitate hiving swarms.

W. S., Mudgee, writes.—Bees in this district are doing splendidly, and honey is coming in fast. So far there has been an exceptionally small percentage of swarms. I have only had two from about twenty hives. We have had about five inches of rain in a month, which has worked wonders in the matter of vegetation. Many of the fields are white with clover, which is being well patronised by the bees.

Mr A. E. Kendall, of Stockinbingall, advises of the existence of disease among his bees.—The bees affected seemed to lose all power of wings and legs, their abdomens are greatly distended, and when pressed between finger and thumb they disgorge themselves of the nectar of the box which they had apparently just gathered. Occasionally, when squeezing the abdomen, the bees discharged a fluid and greenish looking excrement, and I for a time was inclined to the belief that the bees were suffering from dysentery. At first I sprayed the bees with carbonate of soda, salt and water, but with no noticeably good result. After about a week I dusted powdered sulphur over bees, combs, &c., and the next day subjected the bees to the fumes of burning sulphur. About two days after the last operation the mortality ceased, and the bees have been apparently very healthy since."—Mr Kendall sent samples of dead and dying bees to the Agricultural department, who identified it as "Gayton's disease," also "Gayton's Foul Brood."

M'Lain's remedy, as recommended by many, we gave in our April number of this year. Our own experience is that sulphur is effective when used at the commencement of the disease, perhaps because by purging or otherwise it puts the system into better form for resisting the disease, and so prevent its getting the mastery. When we remember that cattle get "blowed out" if allowed free access to a lucerne paddock, and cattle and horses get the "scours," after feeding on young grass, need we wonder if bees also suffer at times from what they feed on! Would not a little more enquiry in this direction be profitable?

For Honey Labels and all descriptions of Printing send your Orders to Bee Bulletin Office.

Canadian Beedom in speaking of clippings the wings of queens says :--The probable, if not certain, effect of the deprivation of an important organ in the mother-bee on the workers, after this process of clipping has been continued for several successive generations. Many generations of bees can be had in a very short time, and unfavourable results may be induced within the brief space of one or two seasons. Though the organs of flight are used but seldom in the case of the queen, degeneracy in her wings will be apt to reproduce itself in the wings of the workers, and it is a fair question, of vital pertinence to the best interests of beekeeping, whether you can diminish the efficiency of bees' without impairing their usefulness? There is another view of the matter: Even though you were to suppose that no injury would be done to the force of worker bees, the importance of strong wing power to the queen herself can hardly be overrated. Nature's great law, which provides for the survival of the fittest, operates in connection with the queen's wedding tour. It is a race, in which, as in the case of courtship with human beings, the female makes a feint, of trying to get away from the opposite sex. What is mere hypocrisy with womankind, is reality with the queen-bee. She puts forth all her powers of flight, and it is the strongest, best drone who wins the coveted prize. Lesson her wing power, and is she not likely to fall into the lutches of some poor, feeble drone whose exercise of the paternal function would be a curse rather than a blessing to the hive?

G. S. H., Cootamundra.—We are just on the advent of what I trust may be a glorious season for bee workers in this southern district. So far apiculture has been in a dormant state, but somehow our little yellow-banded friends seem to reach all the remote corners of the country. Hitherto gin cases have reigned supreme in this locality, but with the occasional advertisements about golden beauties and bar-frame hives, etc., an oc-

casional investment has been made, and hence the stage at which we now find ourselves in this district. About 16 miles N.W. is Mr. Evald's apiary of about 40 colonies, all worked upon the Heddon principle, with an imported queen at the head of affairs. This gentleman has had a considerable home experience on the continent, and is a thorough exponent of the science, and will be heard of to greater advantage shortly. At Gundagai, Mr. Sheather runs somewhere about 100 colonies, and has had fair success. At Garrangula, 24 miles east of here, is situated the apiary of Macansh Bros., who run, I think, about 200 hives of first-class bees. They also own an extensive apiary at Gosford. These enterprising young gentlemen have set the industry the example of dealing direct with the public. I am told, that finding certain rings formed amongst the Sydney dealers, to boycott their honey, they had light vans specially built and tastefully painted, and run around the suburbs of Sydney for the sale of their honey. The scheme proved very successful. All along the Gundagai line the fettlers are amateur beekeepers, and many such are to be found in the railway service. At June Junction, 40 miles south of here, several railway employes go in more or less for beekeeping, and the same order obtains at Harden, 26 miles N.E. of here. At Cootamundra, beekeeping is but in its infancy. Mr. W. H. Matthews, a gentleman who never fails with the aid of intelligence and energy in such ventures, heads the list with 12 or 14 mixed hives. Next comes Mr. Cox with 12 (blacks) which he intends transferring into frames in another week, and Italianising. Mr. Gosper holds about nine hives, some pure and some hybrids. Mr. Gersback has six, all pure, 3-banders of the Moody type; and lastly, your humble servant possesses seven, all having pure queens from the various colonial breeders. The silver wattle is now in full bloom, as also the almond blossom, upon which the bees are eagerly at work, and of course

this will be succeeded by the ordinary fruit bloom, but so far no trees are out; the season is a late one—some of the box trees are still in bloom. Foul brood is not much known here, only amongst the black bees. Altogether I consider this district a good one for bees, and hope I may be able to post you good yield records by the end of the season. I omitted to mention Mr Cooker, of Brookfield, 4 miles from here; he runs some 50 hives. He has been Italianising during the past season. I think, Mr Editor, that a note stating the date up to which correspondence should reach you monthly, so as to be in time for publication would be a guide to correspondents.

We have constantly advertised the 20th of each month as the latest for receipt of correspondence and advertisements.

B. B., Braidwood.—Re that Foul Brood Act, some beekeepers don't want it because they will have to pay a small tax. Well, if that was the only objection I don't think it would be worth taking notice of, for I have no doubt that at least 90 per cent. of those who keep bees for the dollars that are in the business, would willingly pay the tax if this dreadful scourge could be got rid of by Act of Parliament. But can we get rid of it if the Foul Brood Bill is passed? Are any of the F.B. Acts in existence at the present time a success? If so, which? If not, are we likely to get a Bill passed that will be a success? Those appear to me to be the only questions worth considering, unless it be the appointing of inspectors. I don't think that say a couple of inspectors appointed by the Government would be a bit of good, in fact I think it would simply be a waste of money. The only way I think to deal with it would be to let the beekeepers in the different centres throughout the country appoint one of their local men to attend to their own district, so that he would be available at any time to inspect any suspected apiary. Of course he would have to be paid. Then the box hive men would be difficult to deal with. I don't think we need trouble about the

bee trees in the bush, for I think we have little to fear from them. It is the box hive men who rob their bees, say once a year, and perhaps have Foul Brood badly; then they either through ignorance or carelessness leave the old comb lying about for days, in fact until it disappears of its own accord. Now, I say that such carelessness is criminal, and if it is done through ignorance, then we require some means of teaching people better, and perhaps one or two prosecutions in each district would be the easiest way of doing it. I am glad that our friends on the Richmond, Clarence, and Tweed districts are free from Foul Brood, and may they ever remain so is my earnest wish. But because they are free now is no guarantee that they will remain so, and if it once gets a good start I am sure that they will be just as anxious for a Foul Brood Act as their less fortunate brethren elsewhere are at the present time. Last year I lost eight out of fourteen colonies through it, and the remaining six became so weak after (I treated them on the McEvoy plan) that it just took them all their time to make up nicely for winter. Just let me give a hint to those who have had no experience in treating on the McEvoy plan. It is—cage the queen if she is valuable for about three days, or they may have some trouble with their bees swarming out. I lost my best queen last year through not knowing this. I am afraid that I am trespassing too much on your space, so I shall conclude with the hope that the *Bulletin* and its editor may continue to prosper.

UPPER HUNTER.—Things apicultural at very low ebb up here, owing to bad seasons, paralysis, &c. I had 82 colonies in May, mostly good; I have 34 now, mostly poor; cause, paralysis. I have taken 14, all the best, out about five miles from town, to try and get a little surplus—no such luxury to be hoped for in town. Is ironbark considered a good honey producer? I mean the common, narrow-leaved. If so, there is a splendid show of buds, and thousands of acres of it.

[Yes, you ought to do well from it.]

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

Thomas B. Blow

Begs to call special attention to the following Seasonable articles, which for high quality have never been excelled:—

Enamelled Metal Section Cases. Exhibitors at Shows, and those who have large quantities of Comb Honey for public sale, have become keenly alive to the fact that one of the greatest inducements to Shop-Keepers to consent to stock Honey, and to the Public to buy it, is the appearance and neatness of the get-up of the package containing the Honey in Comb. They can be had with or without fastenings.

Honey Bottles. Special attention is called to the Metal Screw-top Honey Bottle for use at Shows, these being of very fine quality.

Perfection and Rapid Tin Feeders. Now is the time for Feeding-up Stocks that are short of supplies. For quick feeding the RAPID TIN FEEDER is all that can be desired. My Feeders have stood the test of many years, and are still the best in the market. In the Catalogue mentioned below full descriptions and illustrations will be found.

Honey Extractors, Honey Ripeners and Honey Presses with all the latest improvements. Also Smokers, Tinware of every Description, best Sheffield Knives and Cutlery of all approved patterns.

Special Terms offered to the Trade.

Send for 74-page Catalogue, with 120 illustrations.

T. B. BLOW, Welwyn, England.

The Garden and Field

IS an Illustrated Paper, published on the first of each month, dealing with all matters relating to Garden, Orchard, Vineyard, Farm, Dairy, Livestock, Poultry, Bees, Rural Industries, &c.

Subscription—6s a year.

GRENFELL STREET, ADELAIDE, S.

Send for a Sample Copy.

Scale of Prices for Advertisements

IN THE

"AUSTRALIAN BEE BULLETIN."

HALF PAGE, per annum, £5; half-year, £3, per quarter, £1 15s.

QUARTER PAGE—per annum, £3; half-year, £1 15s; per quarter, £1.

EIGHTH PAGE—per annum, £1 15s; per half-year, £1; per quarter, 12s.

SINGLE INSERTION—first inch, 3s. 6d. succeeding, 2s. 6d.

If booked, 10 p.c. extra added to above rates

OCTOBER 24, 1895

The Australian Bee Bulletin.

Leather Coloured
and
Golden Italian Queens
5s. each.

READY THE FIRST WEEK IN OCTOBER

HAVE
Grey Carniolans
and
Five Banded Queens.

To arrive in the second week of October,
which I shall breed from as early as possible,
prices as above.

H. JERVIS,
MOSS VALE.

J. PEASE,
8 & 10 NEWTOWN ROAD

DARLINGTON, SYDNEY,

Importer of American and English

BEEKEEPERS'
SUPPLIES.

Dovetailed Beehives, Comb Founda-
tion, Frames and all other
Appliances kept in stock.

Orders executed on Most Favorable Terms.

THE AUSTRALASIAN BEE MANUAL

*And Complete Guide to Modern Bee Culture
in the Southern Hemisphere.*

BY ISAAC HOPKINS, AUCKLAND, N.Z.

Third Edition.   Fourth Thousand.

Crown 8vo., 350 pages, 143 illustrations.
Acknowledged to be the most complete practical
work on Apiculture yet published.
Published by the Author. Copyrighted in all
the Colonies.


Can be obtained in the Australian Colonies
at the Office of the A. B. BULLETIN and
from Messrs. George Robertson & Co., Lim.
Sydney, Melbourne, Adelaide and Brisbane.
Wholesale and Retail from the Author, Auck-
land, N.Z.

Price List of Bee Appliances free from

I. HOPKINS & CO.
AUCKLAND, N.Z.

The Industrial Journal

Is a Monthly Magazine devoted to Manufactures,
Mining, Agriculture and Trade.

 A Medium for the Sale and Purchase of
all kinds of Machinery.

Largest circulation of any journal of its kind in
the Colonies. A leading feature is the free
advertising of any machinery, mining plant, &c.
for sale in any part of the colony.

Subscriptions 2s 6d per annum. Specimen copy
free on receipt of name and address.

Publishing Office: 298 George-st., Sydney

The Farmer & Grazier,

The Best Illustrated
Farmers' Journal in Australia.

7s 6d PER ANNUM.

J. TWOMEY & CO.,
52 Market Street,
Melbourne

MOLONG.

W. P.

Some time since I promised to send you a short report from this district, and now take the opportunity of doing so. My bees have done well during the winter. White box and ironbark have been in full bloom for some months, and the bees have been rolling in the honey so rapidly that I had to run the extractor during the winter. You may ask how I managed to extract in the cold weather. Well, I will tell you. I have a common cooking stove, which I got for the purpose. I cut a piece of galvanised iron to keep the stove clean, nailed four pieces of board together for a frame, screwed legs on at corners about 6 inches long, set a long screw up the centre of legs to prevent legs from catching on fire, placed a stove and set super on frame, and covered with corn sack. In about half-an-hour it will be ready for extracting.

We had Mr. A. Gale round here some time since, the result of which there are a number of people on the bee racket, and being the leading beekeeper in the district my opinions are often sought. One general question is how do you clean kerosene tins. Well, sir, I have tried various methods recommended by your self and others, which answer, but take up too much time. I have recently hit upon a plan which I have not yet seen in print. If your wife has a stove that will answer all right, if not get her one, and she will bless the day you found it necessary to buy it for her. If you have not a wife get one of them too, but let it be one of the very best in the market, but they are not to be found in the market. Have a few tins with the bungs out (which can easily be done with a red hot furrell, stout enough to retain the heat) near the kitchen, and get your wife to put one in or two if the stove will hold them, after she has taken out her pie. Care should be taken that the stove is not too hot, lest it should run the solder. With a little practice it will be found quite easy and effectual. A rinse out with cold water is all

that is necessary. I am expecting great things this year from the bees, prospects are booming, every description of tree is in bud, and some nearly breaking down, and if we do not get a big honey-flow we never will. There is a little bee paralysis about here. I have had three swarms suffering but not very seriously. Some of my neighbours have suffered more than myself.

Re your question how I manage under a big honey flow, I have not had a good flow since in full swing, so have not sufficient experience to express an opinion as to how things should be done. I have no system but what is known to all beekeepers, that is constantly extracting.

BEES FIVE SHILLINGS EACH.

A shrewd old farmer once outdid a jeweller in some transactions, and the jeweller complained of the way in which he had been treated.

"Well, I'll tell ye what I'll do wi' ye," said the farmer, "I'll sell ye all my live stock at five bob a head, and I'll let ye come and count them yersel'."

The bargain was struck. The day was appointed to count and hand over the stock. The grasping jeweller and his assistants in due time arrived at the farm. They totalled up horses, cattle, sheep, pigs, and the rest. The jeweller then asked when he could remove the stock.

"Bide a wee, bide a wee," said the keen old farmer; "ye haven't seen them all yet."

He then led the party close up to a dozen bee hives, overturned one of the hives with his foot, and amid the yells of the flying party, the farmer was heard shouting:

"Count now, ye rascals; count, count, count!"

The South Coast & West Camden Co-operative Coy., Ltd.

FARM & DAIRY PRODUCE EMPORIUM,

Sussex and Liverpool Streets, SYDNEY.

TO BEEKEEPERS.

We are prepared to receive consignments of Honey for sale. Having the support of 90 per cent. of the Grocers and Storekeepers of Sydney and Suburbs, we claim to have the best outlet of any agents in N.S.W.

A TRIAL SOLICITED. CORRESPONDENCE INVITED.

REFERENCE: CITY BANK, WESTERN BRANCH.



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.

Martin's Home & Farm

For the Busy Practical Working Farmers of
 Australasia.

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., 249 Clarence St., Sydney.

Only
 2/6
 a Year
 12 Issues.

FOR
HONEY LABELS,

AND

EVERY DESCRIPTION OF PRINTING

SEND TO

“Bee Bulletin” Office.

CONSULT US.

SHOULD you have a doubt on any matter in your apiary, or wish for any information, do not hesitate to write us, enclosing a 2d stamp. We will reply to our best per return, and give questions and answers in the following numbers of A. B.B.

VICTORIA.

Beekeeping Friends,—I can supply you with QUEENS THAT ARE UNSURPASSED FOR QUALITY, and GUARANTEED SAFE ARRIVAL and satisfaction to ANY OF THE COLONIES.

I attribute my success to the fact that I have obtained the past seven or eight years fresh breeding queens every season from different places and most noted breeders in Italy and America, and have just landed a very select breeding queen from Mrs. Atchley, Texas, who gives her a very great character.

FOR CIRCULAR AND PRICES WRITE TO
JAMES McFARLANE, LYNDHURST, VIC.

Who will Deny?

CARNI-ITALIANS

Are not the best Honey Gatherers and Comb Builders. Their sealed combs are of snowy whiteness. They submit more readily than other bees upon the application of a small amount of smoke; they cluster very compactly and quietly, and winter remarkably well; are vigorous defenders of their hives, and gather very little propolis, if procured from the first and best breeders in Australasia.

1	3	5	10
5/-	13/-	20/-	39/-

Per letter post, safe arrival guaranteed up to 21 days.

JUST ARRIVED FROM EUROPE IN GRAND CONDITION.

CARNIOLANS. CARNIOLANS.

NEW BLOOD for our Celebrated Carni-Italian strain. Change your breed and avoid Bee Paralysis, by purchasing Queens from our Select Stock.

"LOYALSTONE, LYNDHURST, Western Line,
September, 2nd, 1895.

W. T. SEABROOK AND Co., Gordon.

Gentlemen,—Doubtless you would like to hear how I got on with the Carni-Italian Queen I got from you, the 15th November, last year. Well, she put down both my Italians and Blacks for honey gathering. Notwithstanding that she swarmed twice during the season. I extracted 380 lbs. of honey from her hive, which record, I think would take a lot of wiping out. I intend going in for Carni-Italians this season, in preference to Italians, for some of which I paid a high figure. Believe me, Yours faithfully,

"CHAS. U. T. BURKE."

W. T. SEABROOK & CO.,
Orange Blossom Bee Farm, St. Ives, Gordon, N.S.W.

For Honey Labels and every description of
PRINTING send your Orders to
BEE BULLETIN OFFICE.

For Ligurian Queens

BRED direct from Imported Italian mothers or for Golden Americans. bred from recent importations.

Send me your orders. I am supplying splendid Queens of both strains; I do not in-breed; and disease is unknown here. Last year I got 90% of Queens purely mated. Will show Testimonials or answer any questions. So write!

My Prices are,

Untested, by taking 5 .. 4s each.

Tested, by taking 5 .. 7s each.

A. J. BROWN,

Winner of 11 Prizes in Apiculture at
Singleton Show,
PARKVILLE.

**Oh What Beautiful Bees!
And What Fine Queens!
I never Saw Anything Like it!**

THOSE are the expressions used by bee-keepers who visit my apiary with a view of comparing my bees and queens with those of other places, when I show them my bees.

"Yes, they are as pure as they can be, and that is exactly what you want to stock your apiary with."

The breeding season is on again. I have drones flying since the 2nd of September, in spite of the unfavourable weather, and I solicit your favors for queens, &c. On large orders specially low quotations.

W. ABRAM,

ITALIAN BEE FARM,
Beecroft, near Sydney.

—TO—

Advertisers,

We have secured a
few very nice

COMIC
ADVERTISING
BLOCKS

Which we shall be
pleased to utilise for
the benefit of our
Advertising friends.



Where did you get that Queen?

Apiarist,—"I got her from ROBERTS'? He has just imported from Doolittle, Root and Manum, and you can have your choice? He always sends out fine large prolific Queens, give him your order, and he will please you with his Golden or Leather Coloured Queens."

Untested 1 for 5/-, 3 for 13/-, 5 for 20/-.

Tested 1 for 8/-, 3 for 22/6, 5 for 35/-.

Breeder 1 for 15/-, 3 for 42/-,

Honey or Beeswax will be taken in payment for Queens, if preferred, for all orders of £1 and upwards. Write for Circular giving full particulars.

**A. A. ROBERTS,
ROSEBUD APIARY,
MUSWELLBROOK.**

