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West Maitland, N.S.W.: E. Tipper, June 24, 1893

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THE AUSTRALIAN BEE BULLETIN.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.

VOL. 2. No. XV. JUNE 24, 1893. PER COPY, 6d.
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
R. L. PENDER,
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WEST MAITLAND.


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E. TIPPER, A. B. Bulletin.

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DOOLITTLE QUEENS

7/6 each, or 4 for 20/-. These are bred from what Doolittle describes as 'the best breeding queen he ever owned.'

I HAVE SOLD.

My honey business in Sydney, and supply trade, to MESSRS. A. SHALLARD & Co., as I had too many irons in the fire to properly attend to it. I trust that my patrons will continue the support to the new firm which they so liberally accorded me.

MAJOR SHALLARD,
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The Australian Bee Bulletin

Contents.

The Convention Committee ..	45
S.A. Bee-keepers' Association ..	45
H.R.B.K. Association ..	46
The Munday Hive ..	48
Exporting Honey ..	48
Sheds for Bees ..	49
The Convention ..	49
Another Good Honey Plant ..	50
Rambles of Richard ..	50
Queen Rearing ..	51
Bees for Business ..	52, 53
Australian Honey in England ..	54
Hebblewhite & Co's. Exhibits ..	55
The Mayor of Wingham's Apiary ..	56
Early Experience ..	56
The Choko ..	57
How to Detect Adulteration in Honey ..	58
Broom Handle Swarm Catchers ..	58
Our Letterbox ..	59
Cruel ..	61
Good Things to Come ..	61
Questions ..	62

THE BLUE PENCIL MARK.

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
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 the A.B.B.

THE great majority of leading bee-keepers are emphatic in their opinion that the Italian bees of northern Italy—the true ligurian or leather-coloured race—are not excelled by any bees in the world. I have dispatched orders for sixteen of these queens direct to the breeder in Italy, for breeding purposes in my apiary during the coming season. I have 100 queens of this strain, bred from queens imported this and previous seasons. Prices:—Queens 10s to 20s; Hives, with combs, bees, and queen, 30s to 40s.

C. MANSFIELD,
HUNTER RIVER APIARY,
LARGS, N.S.W.

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Publishing Office: 164 Clarence-st., Sydney

 [We shall be glad to insert in this column Advertisements of dates of meetings of the various Bee-keepers' Associations.]

Hunter River Bee-Keepers' Association.

MONTHLY MEETINGS.

—AT—

Technological Rooms, West Maitland.

TUESDAY, JULY 25.

TUESDAY, AUG. 29TH.

TUESDAY, SEPT. 26TH.

MICH. SCOBIE, Hon. Sec.

The Australian Bee Bulletin

A JOURNAL DEVOTED TO BEE-KEEPING

WEST MAITLAND.—JUNE 24, 1893.

NOTICE. THE CONVENTION.

OUR MR. E. TIPPER will at the Convention be happy to receive Advertisements and cash for same; Subscriptions, and orders for Labels, Honey Pamphlets, &c.

THE CONVENTION COMMITTEE.

THE above met at the Technological Rooms, West Maitland, on Tuesday evening, June 13. Mr W. S. Pender in the chair.

The secretary, Mr. Mansfield, produced a large quantity of correspondence, among which was a communication from Mr H. C. L. Anderson, late Director of Agriculture, in which he said:—

"I feel very grateful for your kindly references to my efforts to encourage apiculture in my official capacity. I have always recognised the value of the industry, and have done my best to do it honour and encourage it. I must congratulate you on the excellent way in which you have organised this Convention, and on the practical and valuable programme of work you have planned. I anticipate great benefit from the discussions that must follow the opening papers you will get from the able men whose names are on your programme. I shall have much pleasure in attending as many of your meetings as I possibly can, and shall always be proud to help in any way the bee-keepers of N.S.W., whom I have found a most intelligent and progressive body of men."

Another communication from Mr. Josiah E. Taylor, of Cowra, the winner of the National prize for apiaries, suggesting a competition for a champion prize of the colony, to be competed for by all prize winners, and offering to put down £5 if all the other prize winners did the same. Another from Mr. F. G. Daly, giving what he termed a "Progress Report," in which he stated he had

made arrangements for Messrs. Hebblewhite & Co. to exhibit imported appliances and Mr. Pender colonial made appliances in the Convention meeting room. He had not up to date of writing been able to secure a firm to make an exhibit of biscuits, cakes, &c., made from honey, but had not given up the matter yet.

The correspondence was received.

On the suggestion of Mr. Munday that time should be set apart to enable members to make themselves acquainted with each other, it was resolved that on the first afternoon the roll be called and the names of the visitors be taken down, and time allowed for conversation.

It was resolved that neat cards containing the programme of business be printed.

It was resolved that there be a question box, the questions to be written on a black board, the chairman invite members to answer, and as much of each evening of session as possible be devoted to such questions.

Mr. Mansfield stated that some 120 names had been given in promising to attend.

Mr. Mansfield reported he had called on Mr. Patten, who had stated he would be unable to attend the Convention, but had arranged with Mr. Tipper to lead off the subject of "Organisation" for him. He had also applied to the government for a large land map of the colony and its fourteen districts.

On the motion of Mr Munday it was decided to request Mr Bradley to act as chairman.

S.A. BEE-KEEPERS' ASSOCIATION.

A meeting of S.A.B.A. was held at the Chamber of Manufactures on Monday evening, 6th May. The President (Mr. F. W. Gee) presided over a fair muster of members.

A letter was read from Mr. C. Mansfield, Hon. Sec. Convention Committee, informing the association of a convention of beekeepers to be held in Sydney on

the 28th, 29th, and 30th June, and inviting cordial co-operation in connection with the movement. It was decided that the Hon. Sec. (Mr. Nadebaum) should send a list of names of S.A. beekeepers, as requested.

Mr. John Darly, of Woodville, read a very interesting paper on "Honey Exports," for which a vote of thanks was passed to Mr. Darly for the valuable information his paper contained.

After a discussion of bee matters, and there being no further business, the Chairman closed the meeting:—*Garden and Field.*

HUNTER R. BEE-KEEPERS' ASSOCIATION.

The usual monthly meeting of the above took place on Tuesday evening, May 30.

Mr. F. C. Pullen was voted to the chair.

Mr. M. Scobie, secretary, read minutes of previous meeting, which were confirmed.

Apologies were made for the absence of Messrs. Patten, Tucker, and E. P. Capper.

Mrs. Moore, of Singleton, and Mr. Nash, of Toronto, were admitted members.

Mr. Munday reported bees were doing well at Toronto and at Singleton.

Mr. Munday moved that the restriction as to price of honey in using the Association's label be rescinded. Seconded by Mr. Scobie. After some discussion, in which the quantity of honey being sold below the 4d was alluded to, also the different qualities of honey in different districts, and Mr. Munday stating that both he and Mr. Tucker had never sold below 4d per pound, the motion was carried unanimously.

Attention was called that many of the public school teachers were summoned to attend an examination on the first week of the holidays, instead of as in previous years the week previous to the holidays. This would interfere very seriously with members desirous of at-

tending the Bee Convention, especially as some of them were entrusted with the reading of papers. On the motion of Mr. W. S. Pender, seconded by Mr. Harden, the secretary was instructed to write to the Minister of Education, asking him to consider the cases of those teachers who were wishing to attend the Convention.

Mr. Mansfield, secretary of the Convention Committee, gave some account of the proceedings of that body. He said things were going along very nicely. Seventy persons had intimated their intention to be present by applying for passes, and many others would be present whose localism to Sydney would not need such passes, and so had not sent in their names. The railway concessions were single fare for the double journey; the same privilege was granted from the steamers plying along the northern coast. Those plying from the southern side had the matter under consideration. Mr. Gale had waited upon four or five establishments in Sydney, and obtained prices from them they would cater for the visitors. Some of them were thought rather high. A photograph of the visitors was to be taken, and the illustrated Sydney papers were to be asked to publish such. The Department of Agriculture were to be requested to make a full report of the proceedings, with a view to their publication. The Sydney papers were to be invited to make a similar report of the Convention. The committee would attend at the room as early as possible on the first morning, so as to receive visitors from out places, and have blackboards for diagrams. Several very useful suggestions had been sent in by bee-keepers from different parts. Mr. Daly had suggested a display should be made of past and present bee appliances, and the committee had instructed him to arrange as full a display as could be obtained. At the last committee meeting the matter of "question box" was discussed, but nothing was done, and the matter was standing in abeyance. It would no doubt be settled and form a very interesting part of the proceedings.

In reply to a question by Mr W. S. Pender, Mr Mansfield said any suggestions as to badges would be gladly received by him.

Mr Munday said he had written to the Manning for a relic of by-gone bee appliances, with which the black-fellows used to carry honey. They used to suck the honey up by a kind of cloth made from the fibre of the stinging tree, which was dipped in the honey, and when filled was laid on a sort of canoe about two feet long, made by tying the two ends of a sheet of ti-tree bark.

Discussion on the wiring of frames was opened by Mr W. S. Pender, who described the method of using horizontal wires and the spur wire embedder. Frames that were wired could stand any amount of knocking about. He had tried starters in wired frames with little success.

Mr Mansfield said he was not an authority on foundation. It would have cost him £20 for foundation for his apiary, and it would be doubtful if he had to sell if he would get that returned. He did not go in for the production of honey, but for queen bees. He had, however, wired a little by using inch boot-maker's rivets, one each through centre of sides, top and bottom, the points on inside being turned down by a pincers and formed into a hook, on which the wires were fixed diagonally in the frame.

Mr Munday always wired the frame and used full sheets of foundation. The wires prevented the combs bulging out in the extracting. It made the frames stronger. Two or three years ago there was very little honey. He had 2000 pounds, which he attributed to using foundation; the bees instead of making wax used their energy in storing honey. The bees used eleven pounds of honey in making one pound of wax. One pound of foundation could be had for 1s 9d, but eleven pounds of honey was worth 3s 8d, a clear profit of 1s 8d in using the foundation. Giving foundation also prevented drone comb, and not so many drones, and gave workers instead. He did not believe in starters—caused too many drones. A sheet of foundation would last for

twelve years. The wax is never wasted. It was of importance to have the combs attached to the frames all round. In selling hives to send away it was a matter of importance to have the combs strong.

Mr M. Scobie did not rise as an opponent of wires or foundation. He had used brush made foundation, which had achieved the same purpose. He said the figures of Mr Munday were not quite correct as there was fish bone or mid rib on combs built with foundation, but not in natural combs.

Mr Mansfield considered the doing away with drone comb no advantage, as plenty of good drones reduced the chance of mismating, keeping the enemy in the shape of black drones out of the way.

Mr Pender did not want drone comb. He chose a queen twelve months old for drone rearing. Two frames would contain 4608 drones, which would be enough for the whole apiary. He had tried starters in wired frames, and it had not been a success. He believed in strengthening by wires for travelling.

Mr Mansfield said he had sent hives away to the Barrington, 80 miles, over rough roads, and they had arrived in good order.

Mr Pender said he could supply foundation comb twelve sheets to the pound, so that there need be no mid rib. He used horizontal wiring, and carried his frames three miles to the apiary, and they did not give in the least. He considered diagonal wires thoroughly unnecessary.

Mr Pullen did not use wires. If combs bulge it must be the fault of the extractor. He had not two cracked combs in twenty-one hives, and nearly all built from starters. A fresh swarm will invariably build worker comb. They only build drone comb in the upper story.

Mr Scobie said Mr Mansfield had spoken of seldom breaking combs. It depended on the source of the honey. He has had honey in the bush that came out like taffy; also if the extracting was done hurriedly.

Mr Munday said you could assist the extracting by warming the comb gradu-

ally, just to blood heat, to go through the comb and liquify the honey.

Mr Harden had also extracted easily by heating the combs. He had experimented with a wire brush to break the cappings. He had not succeeded yet, but would still experiment in that direction. (Applause.)

Mr Mansfield spoke of the plant called "choko." He had sent to Mr Fuchs, of the Clarence, for some seeds, and hoped to have some before the next meeting.

Mr Pender said he had been all through the Tamworth district, and there was any quantity of white box, especially near Tamworth, half in bud but not in bloom. Also the apple tree, yellow box and yellow jacket, were not in bud.

Mr Pender moved and Mr Harden seconded that as the date of next meeting was so near the Convention it be suspended. Carried.

KIND OF HIVE AND FRAME.

REPLIES TO MR. R. J. CRIBB.

The Hive I use.

1. *Top bar*, inside measurement $12\frac{3}{4}$ inches, $1\frac{1}{2}$ in. wide, $\frac{1}{4}$ in. thick. Bottom corner of sides planed off, a piece $\frac{3}{4}$ by $\frac{3}{8}$ cut out of each side of each end to make holes for bees to pass from one chamber to another. Side pieces $8\frac{1}{2}$ x $\frac{7}{8}$ x $\frac{1}{4}$ in. Bottom bar, $13\frac{1}{4}$ x $\frac{1}{2}$ x $\frac{1}{4}$ in. (outside measurements).

Hives, each chamber.—(inside measurement) $15\frac{1}{2}$ x 14 x $9\frac{3}{8}$ in, the rabbit $\frac{7}{16}$ in. deep, $\frac{3}{8}$ in. wide, cut out of sides. Bottoms have a strip $\frac{7}{8}$ x $\frac{3}{8}$ in. nailed round sides and back end for brood chamber to rest on. Tops of hives flat. Timber of hives red wood $\frac{3}{8}$ inches thick. I believe these hives and frames to be *the best*. No burr nor brace combs are built. No queen excluders nor quilts are needed. The *honey chambers* may remain on the hives *throughout the year*. In a large apiary what a saving of trouble and time that is. Fancy the trouble of removing and storing away the honey chambers say of 200 hives, and keeping the frames of comb from the moth during winter. Then when raising sections, no pollen is

ever stored in these, and I never use separators; bees do not like them. I fill the section boxes with foundation and use crates for the sections, and they always come *clean* off the hive. I have given these hives a six years' test, and I have nothing to gain by speaking in their praise—I am not a supply dealer. The hives and frames are easily made; and they may be obtained from Mr Pender, or any other maker of bee appliances. It certainly would be very much better for every one to use the same kind of hive, but I hardly think it is likely to be done, though only one style of hive should be used in an apiary.

J. F. MUNDAY.

EXPORTING HONEY.

The Editor of A. B. Bulletin.

Sir,—I wrote to the Department of Agriculture, and made some suggestions as to the opening up a market in England for our surplus honey. The following is a reply, which we must regard so far as favorable. Yours faithfully,

W. S. PENDER.

Crumfin Apiary, W. Maitland.

Department of Agriculture,
217 Macquarie street,
6th June, 1893.

Sir,—With reference to your letter of 18th ult., I have the honour to inform you that we are communicating with the Agent-General for the colony, asking him to obtain the fullest information regarding the prospects of obtaining a market in England for the surplus honey produced in New South Wales. We have also asked for information as to the particular description of honey most in demand on the London market.

I have the honor to be, sir, your obedient servant,

WALTER S. CAMPBELL,
For the Under-Secretary.

ERRATA.—On page 37 in our last issue, in foot note No. 3, read page 230 instead of page 280.

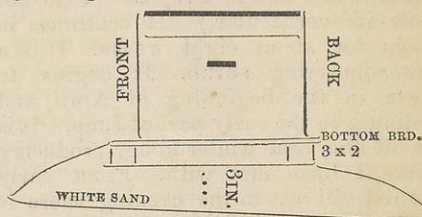
SHEDS FOR BEES.

We promised to get some opinions re sheds for bees for this issue. Up to the present we only received two.

Mr A. Wyton, of North Killarney, writes:—"Re bees in shed, I have not commenced beekeeping yet, so I have no experience of how sheds would answer, but I know sheds are used successfully in the Cape Colony, and I know no cause why they should not here. It is my intention to use sheds for bees when I commence beekeeping." We wrote to Mr Wyton to tell us the kind of hives used at the Cape with the sheds, and he replied:—"The hives used in the Cape were the sectional hives, for which method of beekeeping rough sheds were indispensable."

To Mr M. Smith, of Launceston, Tasmania, we are indebted for the following:—"Your query re sheds. I don't like them. I believe in a free circulation all around and above the hive as well as below, by contracting the entrance, and on a fine warm day towards the end of May contract the hive with dummies; of course taking for granted the colonies are strong and have a young and healthy queen, and plenty of supplies or stores. My experience is that they will generally winter well. If the end of July should be genial and sunny, open up and see that they have the queen and stores, and close as soon as possible, making up either that may be missing either by uniting or otherwise, and leave until end of August if feeding can be done without allowing the temperature of the hive to lower too much. I have found that it induces the queen to start laying, and by the time our spring honey begins to flow we have our colonies in tolerably good if not in really good condition. However, I feel as though it would appear that I am trying to teach one who knows the business better than myself. This is far from my thoughts. My idea is to give my Northern Tasmanian experience. My hives are on the ground, bottom boards nailed to 3 x 2 or 4 x 2. They are placed upon a slight mound about

3 inches above the level of the apiary ground. The bottom board is perfectly level from side to side, but 1 inch in 2 feet fall from back to front. I will try and give you an idea of how it looks.



There is a trellis on the Northern side as shown in Root's A B C with grape vine growing thereon. I find they give good shade in summer and allow all the sun and warmth in winter, besides delicious fruit for the family; but only early grapes are of much use, or they may be cut off before ripening with the early frosts we sometimes experience. I have tried my hives by filling between the dummy and side of hive with chaff (chaff cushions would be better), and it answers well, so that should I ever find that my colonies suffer from cold I will provide chaff hives for them, or an outside shell with chaff cushions to go between for winter use.

Use Foundation from the Drumfin Prize Apiary.

CONVENTION.

Just as we were going to press Mr. Mansfield called and informed us that Mr. Gale was working hard on behalf of the Convention. As the Educational Department would not allow bee appliances to be held in the Girls' High School, he had obtained a portion of the new Technical Museum for the exhibits. He was also getting menus of either a proposed banquet or "tea," to be held during the sitting of the Convention. He also says that a Mr. Callaghan, an old established Sydney caterer, intended to present to the Convention a wedding cake, in which honey has been used instead of sugar, and other pastry in which honey is used.

ANOTHER GOOD HONEY PLANT.

Sir,—Growing near my home is a fine specimen of *Dombeya Drageana* (I do not know its vernacular.) It continues in bloom for about eight weeks. It is a winter-flowering shrub. It begins to flower in the beginning of April, and continues to the early part of June. It is one of the best winter honey-producing plants I have met with. From early morning till late in the evening there is the constant hum of the bee in it, even in this rainy season. The plant is exceedingly ornamental, growing to the height of about 9ft.; it can be trimmed back to any height. The blossoms, which are produced in clusters, are white, single, and somewhat larger than a sixpence, indeed very similar to a bunch of cherry blossom. The anthers yield a good supply of a pale yellow pollen. The plant is easily propagated from cuttings or seeds. I have made enquiries from Messrs Ferguson, nurserymen; they have a small number of plants on hand. The plant is a native of the East Indies, Bourbon, and the Isle of France, and should therefore do well in all the warmer parts of the colony.

ALBERT GALE.

Sydney, June 14th, 1893.

RAMBLES BY RICHARD.

RECOLLECTIONS OF THE '92 CONVENTION.

As we are on the eve of a second National gathering of bee-keepers, a few reminiscences of its very successful forerunner may be in order.

In the first place, the suggestion that such a gathering should be held was first made by the ever-moving secretary of the H.R.B.K.A., Mr Mich. Scobie, and was disseminated through the medium of the "Greta and Branxton Gazette," a newspaper in which the courtesy of the proprietor, Mr. Edwin Tipper, a bee department was given room, and from which humble column the present "Australian Bee Bulletin" has sprung.

The Hunter River B.K.A. entered thoroughly into the scheme, and appointed a committee to sit upon and hatch the idea.

The committee were granted the use of the funds of the Association for the purpose, and sent circulars to every known bee-keeper (then amounting to over 500) inviting them to be present at West Maitland upon the date fixed, and also requesting them to answer certain questions in regard to bee-keeping in their district and to give the names of other bee-keepers, and also to spread abroad the invitation.

The information which flowed in in return has been compiled into a very condensed and valuable form, and is well worth the perusal of bee men and is a splendid index of the position of the industry at that time.

During the currency of the Convention some 47 bee-keepers attended, some having come from 500 miles north and others from a similar distance south. The proceedings were formally opened in the Town Hall by the Mayor, officially welcoming the visitors to the town of West Maitland. Next the president of the H.R.B.K.A., Mr R. Scobie, M.L.A., gave an interesting address; after which a very complete programme was carried out, and in proper order. A splendid photograph was made of all those present at the inaugural meeting—with the exception of Mr J. F. Munday, the father of bee-keeping on the Hunter, who, not knowing of that item of the programme, left the building—which photograph was reproduced for the second number of the BEE BULLETIN, and which is here again inserted that the memories of old subscribers may be refreshed and that new ones may have the pleasure of viewing.

At the final sitting a committee was appointed, charged with the duty of again calling the convention together, where and when it was thought most desirable. How that duty has been carried out we will be able to tell you after the coming Convention.

QUEEN REARING.

[BY W. S. PENDER.]

Continued from page 32.

INTRODUCTION OF QUEENS.

THE number of methods of introducing queens is innumerable, and success may attend any one of them for a number of times, and all of a sudden fail, with the exception of No. 1. It is well-known that a hive of bees in a normal condition and during a honey flow, will accept a new laying queen almost under any conditions; likewise also a colony preparing to swarm. In the latter instance, if the bees do not swarm the day after a new queen is given them, it is better to artificially swarm them by removing all their combs and giving foundation or empty frames with starters. No. 1. In case of an imported queen or very valuable one, in which any amount of trouble will be repaid with success, I find the following certain:—Go to several hives and take from them frames of *hatching* brood with a little unsealed honey, until you have three or four combs—do not take one old bee with them. Place these combs in an empty hive, close the entrance, let the queen (previously clipped) loose, or cage her on one of the combs for a few hours, put on the cover and place the hive in a warm place. In say two or three hours there will be a quantity of young bees emerged. The queen, if caged, should now be let loose on the combs. The hive may remain closed for three or four days, when, if proper combs had been selected quite a little colony of bees will surround the queen. The hive may now be placed on a stand, leaving just sufficient opening at the entrance for one bee to go in or out. In a few days, i.e., when the bees commence to work, the entrance may be enlarged. In warm weather the hive, containing the brood and queen, need only be placed over a strong colony, having a wire-cloth division between, prepared as follows:—Make a frame of $\frac{1}{2}$ in. thick slats the exact size of the hive, and cover on both sides of it a sheet of wire-cloth. These sheets will, if well

stretched, be $\frac{1}{2}$ in. apart, and will prevent bees between the hives having any communication. Perforated zinc (not queen excluding zinc) may be used between, but is not so good. The heat from the hive below will be sufficient to hatch the young brood.

It is more than likely some or all the combs will contain unsealed brood, some of which will perish. Those which have crawled out of the cells should be cleaned off the bottom when setting the hive out, and if much remains in the combs it would be better to give the combs to a strong colony, giving the new hive say two combs of fresh hatching brood and two combs of honey.

No. 2. If the queen you wish to introduce to a colony is in a nucleus (queens are more easily introduced to nuclei than full colonies), it is simply necessary to remove the queen to be superseded from the colony; give a few puffs of smoke, and then proceed to the nucleus—give them a few puffs of smoke, find the queen, remove two or more combs, bees and all, having the queen between the combs, and insert the whole in the centre of the brood nest of the colony, close the hive and the introduction is done. This is best in the middle of a warm day, and there must be some honey coming in.

No. 3. If I take a strange queen to the apiary, one that I reared in town or received from a bee-keeper, and it has been out of the hive a few hours, I simply give the colony to receive the queen a few puffs of smoke, enough to subdue them; remove the old queen, put a little honey from this hive on the new queen and let her run amongst the bees from the top of the frames, close the hive and leave them.

No. 4. Remove the queen from the hive to receive the new queen a little before dusk, and put a mat on the frames if there is not one there already. About thirty minutes before dark place the new queen, without any food, in a small test tube, having a perforated cork to admit air to the queen; this should be kept in a warm place. At the expiration of thirty minutes proceed to the hive, lift one cor-

ner of the mat over empty combs (if there are any), give a slight puff of smoke to drive back any bees, draw the cork from tube and allow the queen to run in, replace the mat and cover and leave the hive. I would not recommend this method if the queen has been out of a hive more than two days. A test tube is best, as a queen is easily shaken out.

No. 5. Make a cage of wire-cloth about $2\frac{1}{2}$ inches long, 1 in. wide, and $\frac{3}{4}$ in. deep, by wrapping round a stick 1 in. x $\frac{3}{4}$ in.; plug each end with a wooden plug. One of the plugs should be 1 in. long, and through this bore a $\frac{3}{8}$ hole into the cage. Fill the $\frac{3}{8}$ hole with *Good* candy rammed in tight, place the queen in the cage, put in the plug, and proceed to the hive containing the queen to be superseded, remove her and lay the cage containing the queen over the frames, covering a space between two frames, close the hive and leave the bees to do the rest. The queen will be released in 24 to 48 hours. This method is good for all queens even if a week or more out of the hive.

No. 6. Cage by the usual method in a cage provisioned with candy about a pint of bees, without a queen or any combs, and place in a cool dark place. The bees in a short time will cry for a queen. When they have been queenless about twelve hours (sometimes less will do), drop the queen right among the bees through a hole in the top of the box. Leave them thus for about six hours or more. Prepare a nucleus hive with one comb containing sealed brood and only a few unsealed cells and two or three frames having a little honey. Just after sunset place the nucleus hive on the stand it is to occupy, sprinkle the caged bees with a sweet syrup, and shake them into the hive, put on the cover and leave them. The syrup is to prevent them flying when emptied into the hive. If too much unsealed brood is now given the bees are likely to destroy the queen and start queen cells. If no honey is coming in it is necessary to feed for a few days. When the queen commences to lay the colony may be built up with combs of sealed brood.

There are many other methods, but I have given those I consider best. The following may be of use in helping to decide which method to adopt. Always have bees subdued with smoke before attempting to introduce a queen for if they get to stinging the beekeeper, they are likely to treat the queen likewise, smoke is best.

Do not allow any bees, that accompany the queen, liberty in the apiary. They often cause trouble in introducing, and may be the means of introducing foul brood, &c. Just kill them as soon as the queen is cared for. Don't attempt to introduce a queen to a hive having no brood, as old bees will not usually accept a queen. Better unite these queenless bees to another hive, and form a nucleus with young bees and brood, if necessary. Methods number 2, 3, and 4, are for queens that are laying, or have been within the previous twelve hours. If a queen has been caged longer than that, better adopt number 5 or 6. Do not attempt to introduce a queen unless you are sure the bees are queenless.

After a queen is liberated in a hive, or a fresh queen caged in a hive, it is not good to disturb the bees, until the queen has had a run over the combs for about 24 hours, or in a case where a queen has come from a distance, until she is likely to be laying.

BEES FOR BUSINESS.

BY J. F. MUNDAY.

Continued.

To secure energetic bees for our apiary, we must be careful in the way we breed them. (1) A large number of drones should be reared in hives of a pure race noted for their vigour, and afterwards queens from pure queens of the same race, as distantly related to the drones as possible, and whose workers are remarkable for their gentleness and good honey gathering qualities. (It would be better to obtain these queens from some distant apiary). Of course no other drones should be tolerated in the

apiary but those above mentioned. How common it is for beekeepers, when any swarm of good bees issues, to allow a young queen to be reared in, and become the mother of that hive. Now, I say as a rule, discontinue doing so, but by the time the bees swarm, have ready some of these specially reared queens to introduce into the hive a few days after the swarm leaves.

Those who want to know how to rear good queens, should read the articles on that subject, written by Mr. Pender, in the A.B.B. But remember that although bees from imported queens are generally excellent bees for business, they are not invariably so. Be certain that the bees you breed from, are those of a quiet and energetic character, and distantly related.

BEES FOR BUSINESS.

BY C. MANSFIELD.

Mr. J. F. Munday, in the May number of the A.B.B., has under the above heading opened up a question of vital importance to bee-men, and by your permission I wish to say a word or two on the subject.

At the outset I wish to correct an opinion which is almost universally accepted by bee-keepers. It is, that all yellow bees are Italians. No greater mistake can be made. I have, when a lad in England, chased and caught many a yellow beauty over the heath, and I know they were of wild or native races, and no more Italian than I was.

The case seems to be thus:—Almost coeval with the invention of the movable frame hives, and the consequent facilities afforded for the production of honey, the discovery was made that the Ligurian or true Italian bee—sometimes called the leather-coloured—was the bee to keep the extractor going. This race, therefore, was very soon disseminated throughout the countries where bee-keeping is carried on to any extent, sustaining its unrivalled character wherever it went.

In due course the veteran bee master, Frank Benton, set out from America through the other three continents of the world in search of new and improved races of bees, spending upwards of eleven years in the task. He, it was, who brought the Cyprian and Syrian bees to the fore—both yellow races, and brighter than the true Italians, especially in the queens. These two races have spread through bee-keeping countries, and strange to say under the name of Italians. There is an old saw which runs thus:—"Imitation is the sincerest form of flattery," and in my opinion, no greater praise could be bestowed on the genuine Ligurian, than has been inadvertently given by these two races—both as I say elegant in form and colour—coming in under the name of Italians.

Bearing upon this subject, I may quote the following from a report in the *Canadian Bee Journal* of a paper read by Frank Benton at the Washington Convention. In describing the various races of bees which had come under his notice, he writes:—"Apis Indica," (Indian Bee), not so large as Italians. Many were five banded and very pretty, as much as 30lbs of honey had been reported from a hive. He thought they would be worth testing." Can it be that this race is the origin of the five banded bees lately so much boomed in America? These five banded beauties pass too, under the name of Italians, as a matter of course. Mr. Benton, than whom there is no greater authority in the world on the races of bees, sums up by expressing the opinion that no race yet discovered will replace the Italian (Ligurian).

Breeders of fine stock of any kind are fully alive to the importance of the infusion of new blood for the improvement of breed. But they are careful to obtain a new strain of the same breed. For example:—we do not hear of any one importing choice bantams to improve Cochin Chins, nor do Caucasians unite themselves to the patient plodding Chinese, merely to improve the white race. No, the Ligurian is the bee for

business, and to prevent this excellent race from deteriorating, we must frequently import if possible, fresh "strains" of the same "race." I may say that I have communicated with British residents at Brindisi and Naples in Italy, desiring them to furnish me with the names of recognised queen breeders, so that I may obtain new blood. It strikes me, we must change the name of the Italian bee and revert to the original name Ligurian.

AUSTRALIAN HONEY IN ENGLAND.

Mr John Smith, of Montrose Park Apiary, Mount Cotton, near Brisbane, Queensland, writes:—Possibly it may interest your readers, and save those who send honey to the old country considerable trouble and annoyance, if they will read and ponder over the following extraordinary conduct of the Custom-house officials in London.

English Custom-house authorities in London seizing Queensland Honey and Threatening to confiscate it.

Mr Editor, *Australian Bee Bulletin*.—Sir—I have been in the habit of sending my honey to London for the past two years, and as you are well aware, from the printed report I sent you from the pen of one of the most noted English experts, R. A. H. Grimshaw, that our honey is not only *pure* but nice in flavour—in fact first-class, as we take the utmost care of it at every stage. Well, that being the case, you will doubtless be as surprised as we were, to learn that it has been seized in London by the Custom-house officers, who threaten to confiscate it. This has done us considerable injury, for they have already detained it two months; and our customers, who were waiting for the honey, naturally think there must be something wrong about it, or the officials would not seize and detain it. Our honey is put in 60lb and 28lb tins. On each tin is a large label—the large yellow label you printed—13 inches by 9 inches, stating the contents are pure honey. These tins are packed in kerosene boxes (re-made), and on the top of

each box is another label—the direction label printed by you—9 inches by 5½ in. This gives number of tins in each box, and states that contents are pure eucalypti honey from Montrose Park Apiary, Mount Cotton, Queensland.

The reason stated for confiscation is that on one (or possibly more) of the cases "petroleum" was printed.

They totally ignore the fact of the printed label on the outside of every box stating the contents, or of the label on each tin that can be read 100 yards away. But because the old packing case had still on it the word "petroleum," possibly difficult to decipher (as I never observed it), they profess to have power to confiscate the whole lot.

According to this interpretation of the law by Customs House officers, they can seize all honey sent in spirit casks if "cognac" or whisky can be deciphered on the cask, notwithstanding the cask being fully labelled as honey.

Now, did you ever hear of such a piece of stupidity? How human nature, dressed in "a little brief authority," does like to act tyrannically.

I sometimes read of the multiplicity of technical and other subjects that candidates for offices under government have to pass examinations for—but there is one thing however that a candidate never seems to require to be possessed of, and that is "common sense," for however sane or intelligent a person may appear to be before, as soon as ever they get into some petty government office, they seem to go perfectly "daft," and might, like "Dogberry" say "write me down an ass." Or are they like "Mr. Toots," so crammed with technical and scholastic accomplishments that the common sense, they used to be thought to possess, is all pushed out of their heads!

Of course I don't intend to submit quietly to this injustice—not very likely. As soon as I get full particulars I shall take the matter up with the Custom House authorities. But in the meantime the matter might be interesting to the Convention, which might express an opinion on the subject of the seizure, and also warn all beekeepers who ship honey

in kerosene boxes, to see that the old brand on the box is obliterated. Yours faithfully,
JOHN SMITH.

HEBBLEWHITE & CO.'S SHOW EXHIBITS, AT THE AGRICULTURAL SOCIETY'S SHOW, SYDNEY.

In this section, the exhibits of Messrs. Hebblewhite and Co., of George-street, Sydney, made a prominent display at the recent show of the Royal Agricultural Society, Sydney, and they were deservedly awarded champion prize. Of their numerous exhibits, the following hives were shown and pronounced to be perfect by a number of visiting bee-keepers:—The Simplicity Langstroth hive, with self-spacing frames in brood-nest and store-chamber, and with sections (11b boxes), for comb honey. The eight frame Dovetailed hive, fitted with any frame to suit customers' wish, either for extracting or comb honey, is a very strong, well-made, and cheap article.—This hive is now being very largely used in America, where beekeeping is, without doubt, a national industry. Having examined the hives and frames, we next inspected their foundation comb mills and foundation comb. The latter is made from pure beeswax, by dipping and then rolling them through the mill, which forms the base of cells. Sheets of this are then fastened into the frames, and when placed into the hives, the bees draw the wax out until they have made the cells the proper depth. Wire is often used to strengthen the comb, so that it is impossible for the combs to break out of the frames when being handled full of honey. Foundation fasteners, for fixing the foundation comb into the frames and sections were shown; also wire (tinned) for wiring frames, and wire embedders, for embedding the wire into comb. When these frames have been filled with honey by the bees, they are removed from the hives and the honey extracted. The above firm showed a variety of these extractors,—the Little Wonder, Novice, Cowan's Reversible, etc. The last named is one of the latest improved, the frames being reversed in the extractor (without handling or stopping the machine), so as to get the honey out of both sides of the comb. Before the frames are placed in the extractor, the cells which are sealed over by the bees when filled with honey are uncapped by uncapping knives. The Novice, Abbott and Bingham were shown; also a knife heater for keeping the knives hot while uncapping; this prevents the knives sticking to the combs. When the honey has been extracted from the combs, the frames are replaced in the hives with combs emptied, and ready to be refilled. To illustrate the saving to bee-keepers by using foundation comb and extractors, we would mention that it takes the bees just as long to

make 11b of wax, as it would for them to store 12lb of honey. Among the other numerous articles we noticed bee veils for protecting the face, bee-keepers' hats, bee brushes for brushing the bees from the comb; bee escapes for clearing the bees out of honey chamber in a hive before removing the combs; comb foundation, both American and colonial make; comb foundation cutters, for cutting comb to size required; comb mills and dipping tanks for making the comb foundation; bee smokers of various patterns and makers, for quieting the bees when disturbed during inspection; comb buckets for carrying the frames of honey from the hives to the extractors; drone traps, for catching surplus drones during flow of honey; sheets of enamel cloth to place over top of frames; frames of various patterns, but all Langstroth, standard size, were shown, Allwood, thick top, wide (for holding eight 11b sections), Vandueson's reversibles, and the latest American pattern—Root's; self-spacing Hoffman frame, bee feeders, for feeding during winter months when sufficient honey has not been left in the comb; white glass honey jars with nickel screw top, for placing the honey on the market in the most attractive form; also honey tins with patent tops, which requires no soldering; nursery frames, for rearing queens; queen cages, for forwarding bees by post; or introducing queen into hive; queen cell protectors; section boxes for comb honey; circular saw (Barnes 6in.), for cutting bee hive timber, or cases for honey; a large assortment of seeds of honey plants; wax extractors, for refining the wax in old or broken combs, the cappings of comb when extracting, etc. When properly refined, beeswax always commands a good price. All the above articles were shown by Hebblewhite and Co., on their stand, and a large number of others; also of these noteworthy, is their beekeeper's library. This is well stocked with nearly all the leading books on bee culture, a few of which we give below: The A.B.C. of Bee culture—A. I. Root; Scientific Queen Rearing, by G. M. Doolittle, Langstroth, revised; Manual of the Apiary, by Professor Cook; A Year among the Bees, Miller; Bees and Honey, by Newman; Thirty Years among the Bees, by Alley, etc.; Gleavings in Bee Culture, semi monthly; American Bee Journal, weekly; Beekeeper's Review, monthly; The American Beekeeper; The Australian Bee Bulletin, monthly; etc., etc.—*Town and Country Journal*.

Mr. H. JERVIS, Moss Vale, writes: I think it is the duty of every beekeeper to try and increase the circulation of the *Australian Bee Bulletin*, so that it will pay the proprietor and put him in a position to give us some good readable bee matter, as bee men always like to hear how one another are getting on.

THE MAYOR OF WINGHAM'S APIARY.

On Monday last an INDEPENDENT representative accompanied the Mayor of Taree on a visit to the splendid apiary that has been got together by the Mayor of Wingham. The visit was certainly one to be remembered with pleasure, as of course must be any inspection of such admirable examples of the foresight, care, and energy of townsmen. The apiary is close to the site upon which Mr. Pollock's dwelling house is erected. It covers over an acre of ground beautifully laid out and specially prepared for the purpose. Sawdust has been laid down to prevent the growth of weeds, and thus bees are easily detected if they fall off the frames. There are 37 hives of the busy workers improving the shining minute. Of the 37 hives 10 contain Italian queen bees, obtained from Mr Munday, of Woodville. In the other 27 hives the queens are leather-coloured or Ligurians. They were obtained from Mr. Mansfield, of Largs, who expects a further consignment of twelve queens in June and July by the mail steamer from Italy.*

"Which kind of queen bee do you prefer," asked our representative.

"Oh the Italian queens, they are a long way the best."

Mr. Pollock went on to explain that as Mr Mr Munday had lost all his Italian queens during the flood, he (Mr. Pollock), had decided to get a further consignment from Mr Mansfield. The Italian queens prove themselves very destructive to moths and other insects, and since the introduction of the Italians Mr Pollock has had no trouble with moths, of which all the hives are clean. The visitors went all over the apiary, which could not fail to be admired by anyone, whether or not he be an enthusiast in bee culture. Everything was in splendid order and it was clear that Mr Pollock not only thoroughly understands the business, but that he takes a delight in doing everything in a systematic workmanlike way. The visitors were shown several of the hives, in which the samples of honey comb were very appetising. In one hive the queen was observed in the act of depositing her eggs. Sunflowers are grown in profusion on the ground, and the blooms could be seen loaded with the busy workers garnering honey. The visit proved a very interesting one. As it is only a few months since Mr Pollock devoted himself enthusiastically to the work of an apiarist, his success so far is the more praiseworthy. Those who talk lightly of a "Bee craze" have in Mr Pollock's case an admirable example of what may be done by intelligent application to the work. He was warmly congratulated by the Mayor of Taree—as indeed he must be congratulated by all who have the pleasure of inspecting the apiary—on the

excellent condition of things, with hearty wishes of permanent success. The hope was expressed that the industry would become a thriving one on the Manning, and the example set by the worthy Mayor of Wingham was warmly commended.—*Manning Independent*.

EARLY EXPERIENCE.

BY H. W. J. TAYLOR.

About six years ago I had a swarm of bees in the old style of box hive. The season was a good one, and the one hive sent out six swarms within two or three weeks. Of course some of them were not very large ones. I then became quite interested with them. I had heard of the Italian bees, and often seen advertised in papers "queens for sale," about one pound each. At that time I thought anyone that would give that price for a bee must be a bit off his nut. However, I caught the bee fever, there is no doubt about that, and I have not got over it yet. At the latter part of the summer I purchased a swarm of Italians. This was a bad time to buy bees, and I would advise any new beginner to get them in the spring. My hive of Italians wintered well, and when the spring came I divided them and reared two queens. One got purely mated, the other was in a nucleus, but she could not fly; she used to come out on the front of the box day after day and try to fly, but all in vain. I was in a great way over this, you may depend, as it was one of the first I had reared. My Italians were very quiet, and being something new, I was opening them two or three times a day—of course without any smoke or veil—they were too quiet to sting. At least I thought so, but I found that they would sting and could sting. They gave me such a stinging one Saturday evening that they made me stay at home from church on the Sunday. I did not feel inclined to open them again without smoke. I think it is wise to avoid being stung as much as possible. I know a beekeeper who used to take but little notice of getting stung, and after five or six years beekeeping his health failed, and when examined by the doctor

* The leather colored Ligurians referred to, and the Italians, are the same bee.—Ed.

he told him his system was poisoned, and asked him what he worked at. He told the doctor he was a bee-keeper. He was ordered to give it up; he did so, and I think has recovered fairly well. I do not wish to frighten anyone from keeping bees, but as I said before, it is wise to avoid being stung as much as we can. This can be done by wearing a veil, using a little smoke, opening the hives gently and not jarring the frames when moving them. No doubt we have bees in the apiary that, handle them as we will, they will sting. I have often been extracting from nine o'clock in the morning till about five in the evening without getting a sting. I wear a veil, remember. I think I am getting astray; I must come back and tell you how I got along with my bees. By the end of that summer I had got seventeen colonies—I thought I was getting along very well. I began to think I would soon have a nice little apiary, but I found I had an enemy in some of my hives—that dreaded disease, foul brood. I knew then I had a demon to fight, and in a very bad time, as it was coming near winter. What steps would I take to get rid of this disease. Well, I thought, I would try the starvation plan, so I took the bees and put them in clean hives and frames, keeping them fastened in for two or three days. By that time they had built comb, and most likely used or consumed the honey which they carried with them from the diseased hive. I did not destroy the hives and frames, but cut out the combs and melted them, boiled the frames, rubbed some turps over the inside of the boxes, and burnt for a minute or so; then gave them a good coat of paint inside and out. I have used these hives and frames again but the disease has never made its appearance. By the time the spring came I had got rid of the disease, but I had only five swarms left. I then began to think beekeeping was going to be a failure with me, but I had made up my mind to give it a fair trial, so I stuck to it, and from then till now they have done very well. Once since, and only in one hive, I have had the foul

brood in my apiary, and strange to say it was in a hive where I had introduced a queen which I obtained by post from a beekeeper about two hundred miles away. After she had been in the hive for about two weeks, I found that hive had the foul brood. I did not destroy them for a day or two until I had satisfied myself that it was the foul brood. I then took the queen and put in another hive, and destroyed the diseased bees and frames by fire, which I think is the surest way to keep it from spreading where any one has a large apiary. If we should find a number that had the disease it would hardly pay to destroy them in this way.

THE CHOKO.

We are indebted to Mr. A. H. Lewis, of Branxton, for the following clipping from the *Australasian* of June 3rd:—The choco plant, which was introduced into New South Wales last year by the Department of Agriculture, appears to have given very satisfactory results. Mr. O. Fuchs, of Grafton, who conducts an apiary, planted some choco seeds, which vegetated amazingly, producing millions of splendid blossoms for honey. The plant, which spreads over a large area, commenced flowering at the close of the year, and has been well laden with mellifluous blossoms ever since. The bees are extremely fond of the choco, and with the apiarist the newly-introduced plant must become a strong favourite. It is a prolific fruit-bearer, each vine producing some thousands of a fruit much resembling a lemon. These, when boiled, are much the flavour of turnips, and make a very good dish. Numbers of the citizens of Grafton who have tried them express themselves as well pleased with the choco as a table delicacy. The plant, though susceptible to frost, is a perennial and, planted early in spring, vegetates with very little trouble. It bears fruit from January till the winter, and the yield of a single vine (the correspondent writes) is prodigious.

Mr Otto Fuchs, of Grafton, writing to Mr C. Mansfield of Largs, on May 30,

says—"As requested I forward by parcel post the choko seed. I have largely distributed it in this neighbourhood on account of its excellent qualities as a vegetable, and I am quite sanguine there will be a large crop in the coming season, when I will have the opportunity of testing the quality of the honey extracted from the flower, and if my expectations are realised I feel sure it will prove a boon to bee farmers particularly in this district, which seems so suitably adopted for its cultivation."

[Mr Mansfield informs us that the seed which he obtained from Mr Fuchs has sprouted well, and looks exceedingly healthy.—ED.]

HOW TO DETECT ADULTERATION IN HONEY.

The following is a translation which we make from the "Bienwater," a German bee-journal published in Vienna, Austria.

HOW TO DETECT ADULTERATION IN HONEY.

1. *Adulteration with glucose.*—Take a tablespoonful of the honey to be tested: pour it into a small bottle; then add three spoonfuls of pure spirit; and shake the whole thoroughly together. In about a quarter of an hour there will form in the bottle a cloudy, whitish sediment; and from this one may be sure the honey is adulterated. Conifer honey, as also that from fir and pine, yields a slight precipitate of dextrine. Dr. Haenle, of Strassburg, can, by means of the polariscope, very easily detect the adulteration of conifer honey by its right-handed rotation.

2. *Adulteration with flour, starch, etc.*—Pour into a tumbler, partly filled with honey, a few drops of the tincture of iodine, stirring it thoroughly with a glass rod. In a few moments it will, if adulterated, be of a bluish colour. If the honey is greatly diluted it will form on the bottom of the glass a sediment of a deep sky-blue colour.

3. *Adulteration with flour.*—Warm the honey till it is quite thin; let it cool off and add very cold water, constantly stirring till the flour separates from the honey and falls to the bottom, where it is easily recognized.

Additions of flour can be easily detected in such honey by warming it. It melts very slowly and burns easily.

4. *Adulteration with Glucose.*—Mix honey with boiling water. If it has not an aromatic smell, but smells of starch or fusil, it is adulterated with potato or starch syrup.

5. Adulteration with glue can be easily detected by an addition of tannin. The latter is often used by wine-dealers to render red wine astringent. When used as an adulterant it forms a yellowish white sediment.

6. The addition of water can be very easily demonstrated by the use of Schachinger's honey-scale. The specific gravity of pure extracted honey is 1.39 kgs. per liter. Watered honey soon ferments and easily becomes sour, and this is always a good means of detecting adulterated honey.

7. Artificial honey known as Swiss, Alp and grape honey, etc, are easily recognised—1. By the presence of sulphuric acid; 2. By a grating taste; 3. By the fact that it never crystallizes, but remains permanently liquid.—*Gleanings in Bee Culture.*

BROOM-HANDLE SWARM-CATCHERS.

A MR. CHAS. WHITE in the *American Bee Journal* says: Here is something quite old, and yet it is new, too. Mr. W. H. Veeder, of Grand Island, Nebr., told me the way they used to catch swarms 20 years ago in New York State. Here is his method:

"We would take broom-handles and wrap rags on the large end, making a roll about 10 inches in length, and about 3 inches through the center, tapering off smaller at the ends. The rags we would saturate with melted beeswax. The other end of the handle is sharpened so as to stick in the ground. We used one handle for every four hives."

Mr. Veeder assures me that nearly every swarm that issues will cluster on some of these prepared sticks. The stick

should be stuck in the ground about 4 rods in front of the hives. Mr. Veeder thinks the scent of the wax has a good deal to do with the bees clustering on the rags.

OUR LETTER BOX.

Mr J. Upfold, of Orange Grange, Raymond Terrace, reports that honey is coming in fast from ti-tree.

Mr Fred. Nicolls, of the Public School, "Wallaroo," Cowra, asks—Would this be a good time to shift from boxes into proper hives? [Too late in the season; wait till the spring.—Ed.]

Mr A. E. Kendall, of Bibbenluke, concludes a very valuable communication with—Wishing you every success with your paper, which I consider far more practical than the majority of books on apiculture.

Mr H. L. Jones writes—I intend if possible to be at the Convention. In America reduced rates are obtained from hotel proprietors as well as the railways, so I trust same will be arranged for in Sydney.—[This is a matter Mr Gale undertook to see to, but as far as we know from Mr Mansfield he has only succeeded in getting three or four places to give him their prices—their ordinary ones we take it. The Sydney caterers are evidently not "bees for business."]

Mr Alfred Brown, of Parkville, writes: I am anxious to hear bee news, and your journal is the best means I know of. My bees are not gathering much now, but are wintering well on their surplus summer stores, which I retained for them. The convention this month should be a great success; I shall attend if possible. Hoping your journal will still improve in every way.

Mr G. R. Harrison, of the early numbers of the A.B.B., is now at Kurrajong, and has again made a start at bee-keeping, a friend having made him a present of 20 hives of black bees, and he is building Heddon hives for them out of apple tree. He expects to get another 20 colonies in exchange for Langstroth² hives, and so to be well on in the spring.

To Mr S. Collier, Bendemere.—Thanks for information. Sorry will not see you at the Convention.

Mr. Thos. Plunket, Castlereagh, says: It has been a very bad season here for honey.

Mr. Donald S. Grant, Silver Oak Apiary, Muscleebrook:—Current number of A.B.B. to hand to-day. I can but concur with the oft expressed opinion of so many of your correspondents re your paper, and wish it an ever increasing circulation. I wish to draw your attention to an error in your report of apiarian awards at our last Show. For honey (liquid and comb) and beeswax, the first prize was not awarded to Mrs. Forrest, as she did not even compete, but was given to your humble servant first, and A. J. Clark second. Three entries only. The National prize was as you report divided between Mr. R. L. Pender and myself. This has been a very poor season up here, at least as far as my limited knowledge goes. I started in October, 1891, with one swarm of Italians, bought from Mr. Munday. These I divided, and with bought swarms and others, I went into winter with 26 (very weak ones at that). I brought 19 through by dint of careful nursing and feeding. By increase and purchase I had 52 on the 9th of March, when my apiary was flooded to a depth of 2 feet. I was at work all the night of the 8th, and had all my bees on stages by the time the water broke over. When I placed them out again about a week after I had the same experience as Mr. Gaggin reports. Swarm after swarm decamped although they had not been shut up at any time. Some got away unperceived, others I secured, so that after doubling up weak stocks I only have 42, and some of those very weak. I have averaged about 130 or 135 lbs. per hive, spring count, allowing for purchased swarms. I had unfortunately extracted just before the flood and as there has been absolutely no honey flow since, I have been obliged to feed pretty extensively. The weather is dead against us.

Mr F. Middlehurst, Goulburn, asks: Do bees get any honey out of the green wattle? [Some wattles give pollen, some honey, but never a great deal, and others neither.—Ed.]

Mr. A. H. Lewis, Clairwood Apiary, Braxton, states:—I have had a very fairly successful season with the bees this year, and all the stocks are strong, and in very good trim for winter.

Mr. T. H. Chapman, Mitchell Island, writes:—I have just extracted about 500 lbs. of honey, and expect to get another lot shortly. Water-gum, black-but, and tallow-wood, are coming into bloom. Honey from ti-tree is candying already. So far I have sold all my crops readily at 4d. a lb. and at 3½d. for large quantities.

Mr. Alfred Brown, Seaford Apiary, Parkville, States:—My bees are not doing so well now; honey is not so plentiful as it was; but I think they will winter allright. None of the queens are laying much. Most of the colonies are strong, and although not working so fast, they have a good supply on hand.

Mr. E. Ezzy, Mount Hope:—I may say that I have been much interested with the *A.B.B.* for the past year, and think it an advantage to have a purely colonial publication for the benefit of bee-keepers. I am glad to see by it that some apiarists have had good honey flows this last season. In this district there has been an abundance of flowers, but very little honey has been gathered. My colonies are strong and healthy, with good stores to winter on, so I hope better times are in store for us next season.

Mr D. W. Parker, North Springwood, writes:—Dear Mr Editor,—Others are sending in their congratulations of the *A.B.B.*, so I don't see why I shouldn't have cheek enough to do the same. I don't often bother you with tit-bits for the *w.p.b.* However, I will tell you that I consider my money well invested, and each copy seems to pay better interest every time. Although the past season here has been next door to starvation I have come to the conclusion that it would be poor policy to allow retrenchment, suspension or reconstruction to put any

dampener on the *A.B.B.*, so sent along the sub. without any grunting. After the fruit trees were over in the early part, swarming stopped, and a brake was put on the breeding, notwithstanding that there was at the same time the grandest display of bloom I have witnessed during ten years of observation, the scene being chiefly due to a tree commonly known and easily detected by the cognomen of "stinking gum." I believe it only blooms about every seven years, so it requires a little life time to test its value. This term the bees worked well in it for pollen, but it seemed as barren of nectar as the dry bones of the valley. The honey from this variety is very much like in color and consistency the liquid that runs from the trunk when cut, and is valued by some for medicinal purposes, but it takes a back seat in the market. From January to the end of March there seemed to be an abundance of honey, but it was too much like the weather, and the gathering cost too much. Stocks kept low, ordinary nuclei went down in spite of everything, and the bee biz. looked gloomy. During March some stock had a touch of what is called paralysis, but it went as suddenly as it came, without any treatment, and so endeth the chapter—*cui bono?* I wonder if Mr Gagin's and Mr Hewitt's bees would have absconded if they had kept them confined until night. I like for many reasons to give them their freedom as soon as possible, but I have found it best in some cases to let them settle down a little after a shaking up. A few weeks of perfect winter weather for the bees, and Jupiter Pluvius is back again apparently bent on keeping us fairly moist until the end of time. Occasionally it looks as if he were changing his mind, but only to be wetter than ever. I see the Beekeepers' Association of New South Wales is to be revived. The Convention is a good time to talk it over and settle it, eh?

[Thanks, and long life to you, friend Parker.—Ed.]

Several communications of interest arrived too late for insertion in this issue.

Mr J. Bailey, St. John's Park, Canley Vale, writes—No honey to be had, no trees in bloom, and money scarce.

Mr W. T. Melhuish, Spring Hills—The honey season has been very bad over here, the spring was too wet and cold for them. I thank you for sending me the copy of the *A.B.B.* It is very good. There is very good information in it.

Mr J. H. Hill in the *A.B.J.* says:—My experience has been that all spring and summer honey—all honey gathered up to the rainy season—will not granulate here, no difference how long it is kept, or how cold or hot it may be.

Mr H. W. J. Taylor, Mountain Apiary Minmi, writes:—Since my last report, there has been a change. The bees are rolling the honey into the brood chambers. As it is winter they are not strong enough to store much in the upper story. About 200 yards from my apiary the spotted gum and iron bark are bending their heads with beautiful white blossom, which is a cheering sight to the bee-keeper.

CRUEL.

The following is from ———

"Dear sir,—Would you please stop sending me the *Bee Bulletin*, as I have neighbours close at hand that lend me the *A.B.B.* when they have seen it."

[The writer doubtless is of the same family as a man we have read of who had advertised for six months without payment, and on being asked for such coolly sent back a letter telling how well the advertisement had paid him, but said not a word about the cash.—Ed.]

Use Foundation from the Drumfin Prize Apiary.

GOOD FOR NEXT ISSUE.

A paper by Mr. G. M. Doolittle, written expressly by him for the *A.B.B.*

Mr Lewis, Braxton, has promised us a paper on transferring bees from one size of frame to another, letting the bees do most of the work. It is a new scheme he has worked out himself, and proved practically with success.

WHAT I SAW AT BINNAWAY.—"Teamster," in the *Mudgee Guardian*, says:—Though not knock-off time, Mr Schumack, who is an enthusiast in bee farming, temporarily abandoned his labour, in order to show me over his apiary, of which he may justly feel a little proud. I counted no fewer than two dozen large, two-story, frame hives, each containing about 20 frames, which are capable of holding from five to six pounds of honey each, so that, on a rough calculation, his present stock—which he intends to increase considerably in the near future—if completely filled, will contain upwards of a ton of honey. What excited my admiration most was (1) his colony of pure Italian bees; (2) a partially-glazed hive, through which every act and movement of the "busy bee" can be discerned, and (3) the honey extractor, a machine by means of which the honey is extracted from the comb without damaging the latter in the slightest degree, thereby effecting an enormous saving of labour to the industrious little workers, and, as we may expect, producing a corresponding increase in the quantity of honey collected.

The annual report of the Essex Beekeepers' Association, England, shows that there are now 24,000 hives in the possession of the members. The past season is described as a "moderate" one, but special allusion is made to the fact that some of the members took as much as half a ton of honey. One farmer who realised that quantity disposed of it at 9d a lb. Increased attention to the apiary has been given by the cottage members, several of whom made a profit of £10 on the season.

At Maryville Bee-keeping engages the attention of many, and in a few years large apiaries will doubtless be seen. Mr. Ryan has 23 hives, and Mr. Murray has just purchased 4 acres of ground, which he intends planting with fruit trees. He is going in very extensively for bee-keeping. Mr. Gale gave two lectures here a short time since, both of which were largely attended and much appreciated.—*Western Post*.

QUESTION COLUMN.

12. Is it true that queens raised late in the fall of the year are darker than their mothers, but the progeny of such retain original lightness of color?

13. Can you give from personal experience and knowledge the difference in character as well as color and form of the Italian, Cyprian, and Holy Land bees?

12. My experience from a first-class queen I don't think they are darker.—J. W. HOPKINS, Ticklehole.

12. Have not observed.

13. No experience except with black and Italian.—F. A. MAXWELL.

12. I understand you mean Italians; have had no experience with them.

13. No.—W. NIVEN, Eugowra.

12. Yes.

13. I know nothing, from practical experience, of any other bee than the Italian.—W. S. PRINDER, Drumfin Apiary, West Maitland.

12. Yes; applicable to last fall; owing to scarcity of honey; more so in appearance than reality.

13. No.—J. E. TAYLOR, Cowra.

12. Yes, and I pride all fall queens as being the mothers of colonies which can lick them all when spring does come.

13. No.—GEO. JAMES, Gordon.

12. No, I have not experienced this peculiarity, rather the reverse.

13. I have had no experience with Cyprian or Holy Land bees, knowing them to be such.—J. F. MUNDAY.

12. Season makes no difference; it depends in each case on the mating.

13. My experience has been chiefly with the Ligurian or leather-colored Italian, so I cannot handle this question, and it is likely I never shall.—C. MANSFIELD.

12. No, I reared some queens in April last, and they are quite as light in color as their mothers and as large, and their progeny are equally light.

13. Have had no experience.—H. B. MCFARLANE, Rooty Hill.

13. Have had no experience with Cyprian and Holy Land bees.—H. L. JONES, Mel Bonum Apiary, Goodna, Queensland.

12. I cannot vouch for the truthfulness of pure Italian queens raised in the fall of the year being darker than their mothers, as I have never taken notes in that particular direction, though such may be the fact, but I cannot give the reason. One thing I am certain of is—both Italian and hybrid queens are much brighter in color during the breeding season than what they are in winter.

13. Sorry I cannot give any information re character, form or color of the Cyprian or Holy Land bees, for as yet I am not the possessor of either of these strains of bees.—P. DRUMMOND, Lawrence, Clarence River.

12. To answer this satisfactorily would require the space of an article. To keep within the limits of an answer to a question I will only say—(1) All pure queens are the same color, whensoever born. (2) All yellow queens are not Italians, neither are all black queens German. (3) I hold all queens who do not throw drone and queen progeny of the same even marking are misnamed.

13. *Italian*.—Under this name all classes of yellow bees are now unfortunately placed. As a matter of fact there are two distinct races in Italy—1. *Ligurian*, a hardy business bee, leather-colored with black termination, which is not pointed, but rather round, may probably have originated in a cross between Syrians and Carniolians—generally very quiet in temper—a good honey gatherer. 2. *Southern Italians*, smaller, brighter, more pointed abdomens than *Ligurians*, temper uneven, not much as a honey gatherer, but very pretty to look at, may probably be descended from Syrians “run down.” *Cyprians*.—A fairly large, flat, tapering, beautifully yellow bee, under certain conditions a good honey gatherer, but prone to swarming; very savage when roused, but not pleasant bees to work with at any time. They know how to rob, however. *Holy Lands*.—I have only seen one colony of these, and as it was in a cold country, my impressions might stand modifying under other conditions. From what I saw of them I would not give them yard room. They were like a small edition of *Cyprians*, very pretty to look at, being uncommonly fond of using their “business end;” very yellow in color, great drone raisers, and at swarming time, which seemed to be whenever they thought fit, would raise a tremendous number of queen cells. Fair honey gatherers, but would sooner rob than live honestly.—“BINNI,” Bolwarra.

RE QUESTIONS AND REPLIES.

Circumstances prevented me from replying to questions 9, 10 and 11. I am now glad that I did not answer them, and

12. Decidedly not, when raised in strong, snug colonies. I frequently raise queens throughout the winter, and find them fully equal to those raised in the summer.

instead of doing so now I take another course. In the first place I think question 9 quite irrelevant, inasmuch as it would not matter if it was definitely proved that confining the queen to a small hive would prolong her life to a greater period, because by so confining her the beekeeper would deprive himself of the pecuniary profit which he keeps his bees for; on the other hand an experiment with one or a few queens would not be a sufficient test for obvious reasons. The replies sent to this question are all but suppositious.

Question 10 is quite explicit. The replies are all in the negative. Why? Can these gentlemen enlighten me—why? I hope they can, and I shall await their explanation for their reason to say "no." Until the desired information is given I cannot accept their "no" as a definite settlement of the question, and I am sure that substantial proof will be forthcoming, when I shall feel it my duty to express my being convinced or otherwise, and may be we arrive at a more satisfactory settlement thereby.

Question 11 is a vague one. What difference is meant? Is it color, quality, habit, or what? And what do the replies prove? I cannot understand them, and I would like to know what the difference of bees and condition of stock meant or has got to do with it. Unless satisfactory reasons for "yes" or "no" are given the simple yes or no is not sufficient.

I shall also let question 12 stand in abeyance until I take up 10 again, as both go well together.

In last issue Mr Mansfield refers to a cheap process of Italianizing. Considering that the bee-keeper had to travel a good distance to beg the queen cells and stay for some time in the neighborhood of the apiary of Italians was it such a cheap process after all, not to mention the moral justification of such a transaction?

May finer weather prevail during the time of the convention as we experienced hitherto. But if it did not rain I would not have had the time to pen this.

Yours, &c.,
W. ABRAM.

Beecroft, N.S.W.



FIRST CONVENTION OF BEE-KEEPERS, APRIL 1892.

There is a Best in Everything! You cannot get Better than the Best!

THE best bees are the true Ligurian or leather-coloured as found in Northern Italy. The queens of this race are of a beautiful chocolate colour and very gentle in their movements, and the workers have three yellow bands of the colour of English leather. No five-banded bees are got from Italy.

A. I. Root is one of the greatest authorities. Read what he says:—"The Italians, combining as they do so many excellent traits with so few faults, have deservedly the pre-eminence over all other races, and this pre-eminence has been held ever since their introduction, early in the '60's." This notwithstanding untiring efforts to discover a better bee.

Frank Benton, apiculturist to the American Government, who spent eleven years in travelling over the world in quest of a better race, declares that "no race yet found will take the place of the Italians of Northern Italy."

All great honey producers—those who count their tons per season—achieve these results with the leather coloured bees. "There is nothing like leather." No others for me.

The Hunter River queen breeding Apiary is admirably situated for the purpose, being about 2 miles from the bush, and all the black bees kept in my neighbourhood have been destroyed by the late floods. To crown all I have regular leisure to attend to the business. I do not, nor do I intend to, compete with any one in hives or appliances. My hobby and forte is queen-breeding.

I have 8 queens to arrive from the most noted breeder in the North of Italy, this month, and 8 more to follow next month. I keep none but tested queens of this strain in the apiary to insure as far as possible pure mating.

Bees and queens from the Hunter River Apiary, have been sent to all parts of the colony, and have given general satisfaction. I sent 34 queens to one customer last season, and 33 arrived safely. I fancy this is a feat with few parallels.

If you want bees that will keep the extractor going, and give you satisfaction, and at the same time not peg out, and leave you empty hives in hard times, why, send along your orders to the Hunter River Apiary.

I shall make five classes. No. 1. are queens imported from Italy direct, which you can have in rotation while they last. No. 2. are selected queens bred from these, and tested for queen progeny, as well as workers, and called for that reason, "double" tested. No. 3. are progeny of imported queens, and tested for worker progeny only. No. 4. are bred from good queens, but have not so good a pedigree as No. 3. No. 5. are young laying queens from imported and equally good mothers, but untested.

Prices of Ligurians or Leather-coloured Italian Queens:—

No. 1.	Imported Queens	30/-
„ 2.	Double-tested	20/-
„ 3.	Best Quality Ligurian	12/6
„ 4.	Ordinary Quality	10/-
„ 5.	Untested	7/6

Hives of bees, with hives, combs, frames, add 15/- to above prices.

During the breeding season I am prepared to supply Queens in quantities of four or over at special rates. Write for prices. Satisfaction and safe arrival guaranteed.

C. MANSFIELD,
HUNTER RIVER APIARY, LARGS, N.S.W.

COLONIAL INDUSTRY.

Beekeepers will be interested to learn that reversible extractors are now being made in this colony by R. L. PENDER, and will be quoted in a few days. The above-mentioned firm are pushing ahead, and **MANUFACTURING NEARLY EVERYTHING** in the Beekeepers' line. A new Temporary Price List is being prepared prior to the issue of a fully illustrated catalogue, the stereotypes of which are on the road from America. Beekeepers wishing bee-goods should write for prices before going elsewhere. Substantial reductions are being made in hives and sections.

B E E S.

Since my announcement, that orders were now booked for Bees, Colonies, Swarms, Queens, Nuclei, &c., I have booked a good number for early delivery in the spring. Queens are being imported from Italy and America, and I will deliver queens from these strains as soon as possible after their arrival. Anyone wishing to get queens, daughters of these queens, can do so by ordering early. These queens will be supplied at the same price as daughters from my present honey-gathering strain. Anyone who has already booked queens can have daughters of the imported by waiting a few weeks longer. All queens are bred as per the articles of W. S. Pender on queen rearing in this paper, and are supplied from the **DRUMFIN APIARY**, orders booked by R. L. PENDER.

ORDER EARLY.—As I am rushed with orders during the busy season, it will be to the advantage of bee-keepers to order their supplies early. I try to get orders filled by return mail, and always do so with comb foundation. Remember our comb foundation is the best made in the Australian colonies. If you do not think so send for samples of heavy brood, medium brood and thin surplus—the latter measures about twelve square feet to the pound. I make all kinds of hives to order, and keep in stock the Root-Hoffmann 8-frame hive. See my exhibit of colonial made bee-keepers' requisites at the coming Convention. Don't forget R. L. Pender's colonial made articles.

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Boss Foundation Fasteners 3s, also of Hebblewhite & Co., and R. K. Allport.

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WE would ask you to kindly pay us a visit during your stay in the City, and inspect our Hives and Appliances. We have just received advice of our first shipment for next season *Ex Levuka*; and although these will not be here in time for the Convention week, our present stock will be well worth inspecting.

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