The New Zealand Beekeepers' Journal.

AUGUST - - 1914.

ISSUED MONTHLY
FOR
THE NATIONAL BEE-KEEPER'S
ASSOCIATION OF N.Z.

PER ANNUM: **3/6** IN ADVANCE.

STONE, SON & CO., LTD., PRINTERS, DUNEDIN.

National Beekeepers' Association of New Zealand.

The object of the Association is the Improvement of the Beekeeping Industry and furthering the interests and the prosperity of the Beekeepers throughout the Dominion.

Membership is extended to any Beekeeper who is in accord with the aims and objects of the Association, on payment of a small fee.

Read the Report of Conference, and see what the first year's work has done for the Beekeeper. We shall be glad to have you as a member.

DISTRICT ASSOCIATIONS AFFILIATED.

Waikato Beekeepers' Association. Hon. Sec., W. Hooper Teed, Waihou, Thames Valley.

Taranaki Beekeepers' Association. Hon. Sec., H. W. Warcup, Hawera.

Canterbury Beekeepers' Association. Hon. Sec., Miss Mackay, Sockburn.

Pahiatua Beekeepers' Association. Hon. Sec., G. Bentley, Pahiatua.

Southland Beekeepers' Association. Hon. Sec., L. Gardiner, Waikiwi, Invercargill.

OFFICE-BEARERS OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND.

President: Mr. Jas. Allan, "Oakleigh," Wyndham.

Vice-President: Mr. J. S. Cotterell, Manawaru, Te Aroha.

Executive: Messrs. H. W. Gilling, Matapu, Taranaki; S. Hutchinson, Hamilton East; C. A. Jacobsen, Little River; A. Ireland, 24 Andover Street, Merivale, Christchurch.

General Secretary-Treasurer: Mr. R. W. Brickell, P.O. Box 572, Dunedin.

A large membership will give the Executive increased funds with which to develop the local and foreign markets and push the export trade. Increased demand will raise the value of your honey crop.

E.A. Earp

The New Zealand Beekeepers' Journal

The Official Organ of the National Beekeepers Association of N.Z.

No. 2 DUNEDIN. 3/6 Per Annum.

GOVERNMENT SUPERVISION.

It is perhaps not too much to say that Government supervision of the beekeeping industry has been one of the most important factors in its progress. A few years ago it was quite a common thing for a beekeeper to examine his apiary in the spring with fear and trembling, in many instances to find that out of perhaps fifty colonies, thirty to forty had died. The cause of this wholesale slaughter was the once deadly foul brood, a most infectious disease, harboured in the old-style gin-case hives.

The Apiaries Act was placed upon the Statute Book and an inspector appointed, then another, and later two more. This Act makes it an offence with a penalty not exceeding £10 for any person to keep bees in other than moveable frame hives. With the menace removed the industry is forging ahead by leaps and bounds. Under the systematic inspection carried out by the apiary instructors, it is gratifying to be able to say that the old style of beekeeping is gradually passing away, and with it the nightmare of the beekeeper. Now a beekeeper can keep his district free from the hive-box nuisance by simply notifying the Department of Agriculture of any such apiaries which may come under his notice.

As the production of honey increased and export was undertaken, it became necessary in the honey industry, as in the butter industry, to control the careless beekeeper for the good of himself and the good of his fellows. Provision has been made to prohibit the export of honey which will tend to spoil the foreign markets by the sending of an article which is not up to the standard. Grading for export has been successfully carried out in the past season, and has given almost universal satisfaction. As in all reforms mistakes and blunders will occur; whilst some oppose supervision, experience will show the Department how to overcome the difficulties.

It has always been doubtful whether foundation made from combs badly infected with foul brood carries the infection to a clean apiary. During the past year the Department conducted experiments in various parts of the Dominion. One experiment was carried out in Stewart Island, where there are no bees, and consequently the island is particularly well fitted for the experiment. The experiments proved conclusively that foundation made from badly infected combs does not carry the infection. Experiments are also being conducted into the actual water percentage in New Zealand honey, but the result of this experiment will not be known for some little time.

Mr. Kirk, the genial head of the Department, is most anxious to help the industry forward, and will welcome suggestions from any beekeeper in the Dominion.

Speaking, therefore, with some five or six years' experience, we can safely say (although here and there the restrictions may have seemed to press hard on some) that Government supervision has been for the good of the industry.

Good Things from Everywhere.

"In the Multitude of Councillors there is Wisdom."

There is probably more foul brood spread in the spring than all through the rest of the year. In most instances beekeepers themselves are to blame for this state of affairs, and the remedy is in their own hands. Few beekeepers, if questioned, would admit that they wanted foul brood, yet once it occurs they do not take effective steps to rid themselves of it. Why not make a little effort this spring to prevent foul brood, either American or European, making any further inroads on the profits of your apiary? It is not fair to your neighbours to keep bees unless you are willing to do all in your power to keep those bees free from disease. If they are worth keeping at all they are worth keeping well. There is no disgrace in finding foul brood in your yard, but the same cannot be said if you make no attempt to rid yourself of it.

One speaker at the Conference, in eulogising the President's work during the year, said that he had put the National Association on its feet and sent it swimming along the road. Further remarks were drowned in loud laughter.

The Executive of the National Beekeepers' Association decided that it was advisable to pay the costs of sending two or three exhibits to the British Dairy Farmers' Show, which will be held in the Royal Agricultural Hall in London, 20th to 23rd October, inclusive. The exhibits of honey are being supplied by Messrs. J. Rentoul (Cheviot) and J. Irving (Albury). The High Commissioner has been asked to report on the honey exhibits generally, and his report will be read with considerable interest now that New Zealand is exporting honey so largely.

Mr. Robert Gibb reports that he is importing some Cyprian queens, and hopes to be able to supply Cyprians mated with Italian drones during the coming seasons.

Mr. W. B. Bray was wrongly reported on page 18 of our last issue. The report should read:—"Honey sold here for export, provided the price is fair, tends to steady the market for those who export on consignment."

Many small beekeepers will be desirous of improving their strain of bees this coming season, but the purchase and introduction of a new queen is to them a risky business, though it is really very simple. Most queen breeders guarantee safe arrival.

It is usually best for beginners to buy untested queens—that is to say, the queen has not been laying long enough for her bees to be hatched, but for honey-gathering qualities they are quite equal to the tested queens, which by the colour of their young bees are proved to be purely mated.

On receiving the new queen, smoke the colony, and find the old one by carefully looking over the frames one by one, and destroy her. Then place the cage, wire side down, on the top of the frames, when the bees will liberate her. Do not open the hive again for several days, by which time the queen will usually be found at work filling the combs with eggs.

Dr. Burton N. Gates, Director of the Massachusetts Agricultural College, was re-elected President of the National Beekeepers' Association of America at its last meeting.

PLANKS OF THE N.S.W. ASSOCIATION.

The New South Wales Apiarists' Association is up and doing, and has invited the co-operation of the New Zealand beekeepers in their endeavours to further their planks. Their principal objects are:—To educate the public re the great food value of honey for all ages, as a food in itself, as compared to other foods, and its many uses medicinally. The Association proposes to offer a prize of 50 guineas, open to residents of Australasia (Australia, New Zealand and Tasmania), for the best article on "Honey as a Food." The statements must be true in fact. The conditions of competition to be drawn up by the Government analysts of New South Wales and Victoria, and their decision to be final.—To obtain the co-operation of all the Departments of Agriculture in Australasia in assisting to make the competition known, etc., and to use and publish widely the articles on honey to help create a greater demand by the public.—To ask the Governments of all the States and of the Dominion of New Zealand to place honey as an article of diet on all the dietaries of all Government public institutions, such as hospitals for insane, benevolent asylums, and so forth, and on the dietary of the Army and Navy.—To ask the various Governments to establish certain standards for honey as to quality, and to define the same—To procure united action right throughout Australasia against all bee diseases, and especially foul brood.—To secure special cheap postal rates for honey as for fruit.—To see that competent judges are appointed in connection with Agricultural Shows.—To endeavour to get effective non-poisonous sprays wherever possible used on fruit trees for the protection of bee life.—To advocate the preservation of native trees wherever it is possible, and the reservation of all forests on lands useless for agricultural and pastoral purposes.—To arrange a conference of apiarists of all Australasia to discuss all matters of interest to bee-masters.

HONEY BOUND BROOD COMBS.

(By J. S. Cotterell.)

At an evening session of our late Conference in Wellington, when I had the honour to read a paper on "How to Increase the Honey Crop," a question was asked, I think, by Mr. Low to this effect:

What procedure would you adopt with a colony of bees in spring which failed to place honey in supers, instead of which they filled up the brood combs with open honey, thus crowding out the queen from laying therein?

My answer was to re-queen. It is well known to apiarists, and I thought so understood amongst those present that with a spring honey flow a young and vigorous queen would so keep the brood combs occupied with eggs and with brood in all stages that there would, except on the two outside combs, be little room available for depositing honey, and if so deposited it would be only temporary.

If such conditions obtained as mentioned by Mr. Low, it is another argument for re-queening in spring, for it is at this season the apiarist can readily determine the quality of his queens by their egg-laying capacity, provided that ventilation, contraction and food (honey and pollen) are right.

TROPICAL QUEENS.

Another question was raised as to the hardihood of the offspring of tropical raised queens. My experience in this line has been quite satisfactory, and I should like beekeepers to consider this aspect of the case.

At what time of the year are the best queens raised in New Zealand? I think the consensus of opinion will be that summer is the ideal time, when high temperatures prevail bordering on the tropical. Such conditions are to be found in Rarotonga all the year round, combined with a gentle honey flow, and I have no hesitation in stating that in that climate as good queens as any raised elsewhere may be reared, and that at a minimum of cost.

Manawaru, Te Aroha.

HASTENING GRANULATION.

(By F. C. Baines.)

Seeing that our export trade is so quickly assuming large proportions, and that it is necessary the honey be granulated before it can be graded, I think some information on the subject would be interesting to readers.

I will give you the method of one of our men who is in a fairly large way. He uses a capping melter (previously explained), also a shallow tray, heated by hot water, over which runs all the honey direct from the extractor. The honey is run into a shallow tank holding about 15 cwt., and during the day is occasionally stirred so that all the honey will be slightly warmed, thereby hastening the rising of scum, etc. This tank is connected with a larger one holding about two and a-half tons, and after the smaller one has been carefully skimmed the honey is allowed to run into the larger. This is continued until the large tank is full, and into this is put what my friend calls a "starter," which consists of a 60-lb. tin of honey granulated fairly stiffly, and the whole is stirred with a strong paddle until the granulated honey is thoroughly mixed in. In about three days the whole will show evident signs of granulation, when it is again stirred, and again the next day, and within ten days it will be necessary to tin it, else you'll want a spade to dig it out. The oftener it is stirred the smoother the grain will become.

NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND.

ANNUAL CONFERENCE, 1914—*Continued.*

THE EVENING SESSION.

When the Conference resumed at 7 p.m. for the evening session,

Mr. J. S. Cotterell read the following paper on

HOW TO INCREASE THE HONEY CROP.

IMPORTANCE OF YOUNG QUEENS INTRODUCED AT THE RIGHT TIME.

To quote the words of a prominent writer, "There is an idea in apiculture that is very old, and very good. I might call it the beekeeper's rule of three, and it might be stated in this form: A hive, some bees, and a field of flowers; those three things we want, and we want as little else as circumstances will permit."

In the present instance, the writer's opinion is that the first essential is location; second, style of hive used; third, race and queen; and fourth, the management by the man behind the hive, and if all of these be satisfactory success in honey production may be looked for.

Now, those who may imagine I am going to deal with hive contraptions to control swarming, with a view to augmenting the honey crop, I fear will meet with disappointment, for my experience of such fixings, extending now over three seasons, is that they are in the main unsatisfactory, as by their use the queen's function is often restricted. I would rather from the past season's work go in the other direction and stimulate brood rearing in spring by giving young and vigorous queens all the combs they can occupy and the colony take care of. Let it be understood that it by no means follows that because a colony possesses a young queen that colony is not going to swarm, for, given the right conditions, swarming will eventuate in any hive.

Quoting from another writer: "I do not at the present time look upon swarming as an instinct of the bees for increase, but I would consider it to be a provision of Nature for their distribution. Perhaps you would call the difference a small one, and yet right on that small difference hinges the idea of swarm control; for if swarming is not an instinct of increase, but is the result of conditions, it follows that if we remove the conditions which would cause bees to swarm, and yet leave to them the full use of their instinct of increase, no swarming will take place."

"Now, it is true that there is once in a while a hive containing bees in which the size of the hive, the capacity of the queen, the ratio of her egg-laying to the hatching of the brood,

the arrangement of the supers, and the temperature and ventilation, are all so nicely balanced that no swarming results during the season."

There is no getting away from the fact that the control of swarming, or the prevention of the desire to swarm, without reducing the numerical strength of the colony, either before or during the honey flow, is the capstone of successful beekeeping.

To quote another prominent writer (Mr. Holtermann): "The successful solution of this problem makes it possible to keep more colonies, to have them scattered, to take a honey crop with less labour and anxiety, and to get a larger surplus crop (if there is a surplus) than can be obtained through swarming. In many localities keeping down swarming makes possible more successful and uniform wintering, as well as, in some seasons, the difference, between a honey crop and a failure."

Now swarming, as most apiarists are already aware, can be anticipated by the shook or other artificial methods, the main points to keep in view being that the queen has abundance of room in which to lay, together with pollen and honey, or prepared feed readily available. Another and equally important matter is that the brood combs from which the bees were shaken or the queen removed be placed in such a position as to form part of the main hive, the object being to save all the eggs, larvæ, and sealed brood already deposited therein, as well as to gradually divert the working force to that portion containing the queen, care being taken to remove queen cells in nine days' time from the queenless brood combs.

All this can be accomplished by placing the queen on a frame of brood, either below or above a queen excluder, with a fresh lot of combs or frames of foundation in the newly-made brood chamber. At the end of twenty-one days an adjustment of new and old brood combs and the disposition of brood chambers can be made to suit the convenience of the apiarist, for if the queen should prove unusually prolific and drone brood started, it may be necessary to give her a fresh set of combs in which to lay. That your queens should be young and vigorous is an essential point, and J. E. Hand has this to say on the subject: "While a vigorous queen in a large brood chamber will have a tendency to prevent the development of the queen-rearing impulse, perhaps some method of separating the bees and queen from their brood at the beginning of the honey flow is the surest and most economical method of swarm control. Such a method would provide ample room for the queen to exercise her *natural functions* and therefore the forces that develop the queen-rearing impulse are not present, and swarming is controlled."

It will be readily understood by the foregoing that all the working force is kept together, and if supers are put on early they will serve the purpose as room for both bees and honey. It is also wise to keep constantly in view (when honey is not coming in freely) to have feed available in the colony, provided

there is not sufficient honey stored in supers or side brood combs.

To quote from another writer: "I do not believe beekeepers as a rule are alive to the importance of stimulative feeding. If you have good vigorous queens, large hives, and if you give a little warm syrup each night for a month before the honey flow, you will get a crop where others will not, and, what is more, your bees will go into winter quarters rich in stores where others will starve. Enough emphasis cannot be laid upon the fact that strong colonies get the surplus, where those not so strong will starve."

Doolittle has this to say: "How often has it been reiterated that a colony of bees numbering from 50,000 to 75,000, and even 100,000 produces the best results, while one from 10,000 to 15,000 gives its keeper little if any surplus. In spite of the prevalent idea that bees work for nothing and board themselves, the colonies numbering between 10,000 and 20,000 are the rule rather than the exception, and consequently they yield only a small surplus, even though a beekeeper may count his colonies by the hundreds or thousands. With such small colonies a much greater proportion of the whole colony must stay at home to care for the inside needs of the hive, thus leaving few fielders, than in case of the colony having 100,000 bees where 10,000 can care for the inside work, and 90,000 can go to the field, thereby rolling in an amount of honey that is sure to ensure success."

Now how can this be accomplished? The writer's answer to that is by stocking your colonies with young and vigorous queens of a good strain, introduced at the right time, either in early autumn or in spring.

My preference is for spring introduction in contra-distinction to autumn introduction for the following reasons:—In autumn introduction of queens you have to find the old queen whilst robbers are ready to pounce on any exposed comb. This operation of finding the old queen may take you a minute or an hour, depends upon the disposition of the colony, and whether or no you stampede the queen with smoke. You may prefer to risk the Miller plan, yet in its experimental stage, for re-queening without de-queening, by the use of smoke and entrance introduction. In any case, at the end of a week or ten days after the introduction of a new queen it is necessary to examine that colony to ascertain if it is queen right. Failing any eggs or larvæ being present, how do you know if the queen has been safely introduced or suffered injury or may suffer injury by balling due to interference with brood comb at this time of the year? Again, bees under these conditions from my experience often fail to stimulate a new queen to lay in autumn, and sometimes supersede her. On the other hand, by spring introduction the old queen is readily found (the colony not being so populous), and the frame on which to look for her, if she is laying, readily located. An important point to bear in mind is that spring disturbance of the colony is not detrimental, but rather a stimulus to the bees, whilst at the

same time the safe introduction of queens is more easily accomplished, and last, and by no means least, her laying can be kept under observation without fear of starting robbing.

To give an instance: A young Italian queen was introduced to a full colony in autumn in the writer's apiary, but for unexplained causes by the end of September this colony was found to be weak, and only able to cover three Langstroth frames of comb, without an atom of brood being present. By careful feeding and contraction this colony returned, without brood being given, over 150 lb. of honey for the season. Again, owing to various causes in experimenting the past spring, the writer lost the greater part of his queens, but, having a supply to fall back upon, the apiary was mostly re-queened in spring and early summer. The results in regard to honey crop were surprising, the average on spring count being 182 lb. per hive (numbering 96), fully 50 per cent. over the previous season's yield.

This brings me to the subject which I wish most to interest you in—viz., how to obtain well-mated Italian queens in spring at a minimum of cost. I think you will all agree with me that one of the duties and responsibilities of any civilised Government is to develop the resources of the country. Now, as honey is one of the resources that require developing, I maintain that if the Government is sincere in its efforts, they will use every endeavour to provide apiarists with good young well-mated queens in early spring. I will go further, and say they should be supplied at cost price. This, I consider, is not too much to ask when one views the expense the Stock Department goes to in importing pure-bred stock for the benefit of settlers. Some here will doubtless say an injustice would be done to those who make a living by breeding and selling queens. In such case, let the Government buy them out or compensate them. Why? Because if early queens were available at a low cost, in twelve months I firmly believe, with proper management, the output of honey would be increased 50 per cent., and in two years it would be doubled, and that without any increase in the number of colonies.

Now, how is the Government going to supply early queens? Why, in a very easy manner, for it must not be forgotten that New Zealand has its Indies—I mean, the Cook Islands. During a winter sojourn there the writer raised a number of queens, all mated to Italian drones, which are flying the year round. As to the number of low-priced queens that would be needed, I venture to predict that it would pay no apiarist to raise his own, but rather let him devote his energies to the keeping of more bees and the raising of more honey. So that, with requeening, say, every two seasons, some thousands would be required annually.

The writer would wish every beekeeper to give this subject his earnest consideration, as he is confident that young, well-mated queens introduced in spring, combined with careful management, are a potent factor in successful apiculture, and the keystone of the prosperity of our craft.

In conclusion, I cannot do better than quote the words of the departed Alexander:—

"I will say first the season is of more importance than any one thing; then the strain of bees; the management; and after these the location and some other less important matters."

"My friends, there is no luck and chance in beekeeping. If your bees don't give you any surplus, pry into everything connected with them until you know the reason why. I cannot understand how some men can be so indifferent to the most vital parts of their business."

"Above all things, don't be discouraged when the losses come, as come they will; let them find you more determined than ever to push on, until success and all its pleasures crown your years of labour."

Editorial Note.—This paper should be read in conjunction with an article in "Gleanings," May 15th, 1914, page 386-7, by F. Greiner, "When is the best time to re-queen?"

An extended discussion followed the reading of the paper, and Mr. Cotterell answered a number of questions. Asked whether queen bees raised in the Cook Islands were as hardy as those reared in New Zealand, he said that he had a number of queens from Rarotonga, and there was no appreciable difference between them and those raised in New Zealand. The native habitat of the bee was in the tropics. Mr. Cotterell advocated stimulative feeding. There was a considerable diversity of opinion on this subject, some of the beekeepers favouring spring feeding and others autumn feeding, while still others considered that there should be no artificial feeding at all.

Mr. Cotterell was heartily thanked for his paper, and the following resolution was passed:—

> "That this Conference ask the Government to establish a queen-rearing apiary on commercial lines to supply beekeepers with queens at any time of the year at the lowest possible price as an encouragement to the industry."

MORNING SESSION—JUNE 18.

The Conference met at 10.5 a.m., Mr. Jas. Allan presiding.

A STANDING EXHIBIT.

Mr. F. C. Baines (Taranaki) moved:—"That the incoming Executive be instructed to procure an exhibit of honey, which could be sent round to the various shows in the Dominion."

Mr. Jacobsen seconded the motion, and suggested as an addition that the Government be asked to convey the exhibit free of charge from centre to centre and show to show. He thought that the Government would make this concession. They would get a column on this exhibit at every show, which would be a very great advantage to the beekeeping industry.

Mr. Baines said that the Department of Agriculture might take the matter in hand and bear the expense. It might include the Association's exhibit in the exhibit which it already sent round to the various shows.

It was agreed that the Executive be instructed to procure the exhibit, and that the Government be asked to bear the cost of its transportation from show to show.

THE DUTY ON BEESWAX.

The Conference next considered a letter from Mr. T. W. Kirk, asking the opinion of the beekeepers as to the advisability of removing the duty from beeswax.

The President asked delegates to express their opinions on the subject.

Mr. Jacobsen moved that the matter be held over until next Conference. In the meantime the Association might establish a comb foundation plant, but at present this was in the hands of the merchants.

Mr. Ireland seconded the motion. He said that if a foundation plant were established in New Zealand, the amount of wax locally produced might prove inadequate, in which case it would be necessary to import some.

Mr. Bray said that the duty on raw wax represented a tax on local industry as against foreign industry. A lot of foundation was being imported, and it was duty free.

Mr. Hutchinson moved as an amendment that the duty be continued. He said that possibly five tons of wax per annum might be imported, and on this a duty of one penny per pound was paid. If the duty were removed the whole of the beeswax in New Zealand would be reduced one penny per pound in value. If anything, he thought that the duty might almost be raised.

Mr. Cotterell seconded the amendment.

The amendment was carried by 13 votes to 10, and on being put as the substantive motion was carried by 22 votes to 5.

The motion asking the Government to establish a queen-rearing apiary was unanimously confirmed, and a committee, consisting of Messrs. J. S. Cotterell, J. Allan and C. A. Jacobsen, was appointed as a deputation to wait upon the Hon. R. H. Rhodes in the matter.

A REDUCTION IN FREIGHT.

The Secretary read a number of letters in reference to the freight rates on extracted and section honey.

The General Manager of Railways wrote stating that the Minister had been pleased to approve of a reduction on section honey from Class A to Class C, but no reduction was possible yet on extracted honey.

Mr. Brickell stated that the reduction was in the ratio of 60/- to 40/-, or 33 1-3 per cent.

On the motion of Mr. Baines, Mr. Hutchinson seconding, it was agreed that a letter be sent to the General Manager of Railways thanking him for the reduction.

The Manawatu A. and P. Association wrote inviting the Association to hold its next annual Conference (1915) at Palmerston North during Show Week.—Referred to the incoming Executive.

NATIONAL JOURNAL PROPOSED.

Mr. Allan said that the next question to be considered was as to whether the Association should establish a National Association Journal.

Mr. Brickell said that during the year it had been borne in upon him on more than one occasion that there was need of a medium through which beekeepers could communicate ideas. There were a number of excellent columns in the daily papers devoted to the industry, but these were of purely local circulation. A journal devoted to the interests of the industry could be turned out at a cost of about £100 a year, and if they could get about 500 subscribers it would not run into very much money. They could issue the first three numbers at a cost of about £20, and last year the report of the Conference cost £14. It was necessary to publish a report of the Conference of some sort, and the journal might serve this purpose. In his opinion the projected publication could not fail to become both useful and popular.

Several delegates spoke in support of the proposal, but others expressed doubts as to its feasibility.

In answer to Mr. Baines, Mr. Brickell said that he proposed a subscription of 3/6 a year.

Mr. Mannex said that in California a successful bee journal was conducted at a subscription of 4/2 a year.

Mr. Bray suggested that authority should be given to issue three trial numbers, further publication to be at the discretion of the Executive.

Mr. Brickell said that two firms in Dunedin had furnished him with estimates, and offered to print the magazine and make themselves responsible for the collection of subscriptions as long as somebody guaranteed the amount of their printing bill month by month. The cost of printing for twelve months would be £84, plus the cost of illustrations, which would cost about £1 per page. The editor's salary would be £25. Receipts from 500 subscribers would be £75, and advertisements should bring in at least £50.

Mr. Edwards said he would guarantee to enrol ten subscribers, and suggested that other delegates should do the same.

Mr. E. G. Ward, who had moved to refer the matter to the incoming Executive for favourable consideration, agreed, at Mr. Brickell's suggestion, to move instead that the matter should be referred to a committee, to report on the following

day. This was seconded by Mr. Nelson and agreed to. The committee appointed consisted of Messrs. Edwards, Baines, Brickell and E. G. Ward.

AMENDING THE CONSTITUTION.

On the motion of Mr. Brickell, clause 11 of the constitution, requiring that sixty days' notice should be given of proposed amendments to the constitution, was suspended.

The Conference now proceeded to consider amendments of the constitution.

WAIKATO PROPOSALS MOVED.

Mr. Hooper Teed then read and moved the following amendments proposed by the Waikato Association:—

"The Association shall be comprised of Branches, and every member of the Association shall be attached to a Branch. Any existing Beekeepers' Association may become a Branch of the National Beekeepers' Association of New Zealand by passing a formal resolution adopting the constitution of the same, subject to the provisions (fees) of clause 3."

"If found desirable, new Branches may be formed from time to time, existing members comprising the same as a nucleus. Also, if found desirable as a means for better organisation, two or more Branches may be merged into one, or members residing within a certain area shall be advised to constitute themselves as a separate Branch."

"The Council shall consist of a President, Vice-President, General Secretary-Treasurer, and four other members (two from each island), who shall be elected at the Annual General Meeting. Should any vacancy occur during the year, the Council shall fill the same."

"The duties of the Council shall be deliberative, consultative and advisory towards the Branches. They shall not adopt or advise being put into force any important scheme involving finance without the consent of the Branches interested therein."

MR. R. W. BRICKELL'S PROPOSALS.

Several amendments of a purely machinery character were proposed by Mr. Brickell.

THE PROPOSALS CONTRASTED.

Mr. Brickell said that in the amendments proposed by the Waikato Association, clause 4 meant that the National Association should consist of Branches, and that every member of the National Association should be attached to a Branch. That was the crux of the whole position from the Waikato point of view. "My proposal," he continued, "is just exactly opposite. I propose that membership shall extend to any beekeeper, in accord with the aims and objects of this body, who forwards the annual subscription. Individual beekeepers are scattered

up and down the country, and in some cases there is no organisation to which they can be attached. In some of these localities there are not enough beekeepers to form an Association. I maintain that if we want to co-operate we must have an organisation to which every beekeeper may be attached if he so desires, and without his being compelled to join a local Association which may be a hundred miles away from him, whose meetings he cannot attend and whose decisions he may not agree with. The rest of the amendments are practically machinery clauses."

COMMITTEE DELIBERATIONS.

On the motion of Mr. Cotterell, Mr. G. Ward seconding, the Conference went into committee at 11.45 a.m. to consider the proposed amendments.

When the Conference resumed in open session at 2.55 p.m., the following resolutions were reported:—

"That the right of membership remain as at present, with a recommendation to the incoming Executive of the advisability of fostering the formation of District Associations."

"That clause 4 be amended by the addition of the words—'The secretaries of District Associations collect fees due by their members and remit to the General Secretary a proportion due to the National on the following scale: From Associations with a membership up to 25, 75 per cent. of the amount collected; from Associations with a membership up to 75, 50 per cent. of the amount collected; from Associations with a larger membership than 76, 25 per cent. of the amount collected."

"At the Annual General or Special General Meeting questions affecting the interests of this Association, of which notice of motion has been given, all members shall have one vote, and Branch Associations one vote for each financial member, which votes may be exercised by one or more delegates from the Branch, as the Branch may direct."

On the motion of the President, the foregoing resolutions were put as a motion and carried unanimously.

A committee, consisting of Messrs. Baines, Cotterell, Jacobsen, Gilling and the Secretary, were instructed to incorporate the amendments in the constitution, and report next day.

The President congratulated delegates upon the kindly spirit which had characterised the discussion in committee, and especially the Canterbury and Waikato delegates.

THE NEW REGULATIONS.

ADDRESS BY THE DIRECTOR.

Mr. T. W. Kirk (Director of Orchards and Apiaries) addressed the Conference on the subject of the new regulations and other matters. He briefly reviewed the work done since the National Conference last year, the most important being the passing of the Apiaries Act. There seemed a chance of the

Bill not becoming law, but urgent representations were made by the National, with the result that the Act was passed. That showed one of the great advantages of union. The thanks of the beekeepers were certainly due to Mr. Massey for the interest he took in the Bill from the time it was introduced. The shortest way of meeting the clause providing for the exclusion of diseased bees, appliances, etc., was to demand that the bees or goods should be accompanied by a sworn declaration from the shipper that they came from an apiary where certain diseases were unknown. This would ensure that no queens should be imported from apiaries where foul brood existed. Local regulations would be issued providing that an apiarist could only send bees from one district to another on production of a certificate from the inspector that the apiary in question was free from foul brood. The regulations of which he was speaking had not yet been completed, but they would be out before the next Conference. Registration of apiaries would be provided for. Altogether the regulations would give effect to allowed 26 per cent. of water, but it might be in the interests of the industry.

Mr. Kirk mentioned that the Cook Islands were not within the scope of the Department.

COMPULSORY GRADING.

Provision was made, he said, for compulsory grading of all export honey, but the regulations would not be strictly enforced for a year or two yet. The net weight of packages of export honey must not exceed 112 lbs. Mr. Kirk also explained the details of the proposed grading system.

Speaking of the work of his Department during the year, Mr. Kirk said that samples of honey from all over New Zealand had been obtained and sent to the Dominion Analyst in order to ascertain the water-content. The Pure Food regulations allowed 26 per cent of water, but it might be in the interests of the industry that this percentage should be reduced.

Experiments conducted by the Department during the year, Mr. Kirk continued, showed that when foundation was made from comb badly infected with foul brood the results were negative, and the disease was not perpetuated. Investigations had shown that a certain amount of poison honey was produced (the poison being obtained by the bees from certain flowers), but that the poison was exceedingly volatile, and became quite inocuous when the honey was matured. It would not be safe to use poisoned honey before it was matured.

The latter part of Mr. Kirk's address dealt with the relations between beekeepers and the Department. He declared that it should be easy to double the export of honey in the next year or two if a proper spirit of co-operation prevailed.—(Applause.)

LIQUID HONEY.

Mr. Brickell asked Mr. Kirk whether the Department would undertake to grade honey in liquid form. If this were allowed beekeepers would get early returns, and honey would arrive

in Great Britain at the best time of the year for selling, and so bring good returns.

Mr. Kirk: At present the Department does not propose to undertake the grading of liquid honey. In this, he added, it was acting on the best advice from Home, which was to the effect that liquid honey constantly arrived in such a dirty condition that it was depreciated very much indeed.

GRADING MARKS.

Some discussion took place in regard to grading marks. Mr. Kirk said that only honey passed for export bore a grade mark. When honey was not passed, no marks of any kind were made upon the tins or cases.

Mr. Hopkins moved—"That the Conference approve of the proposed regulations under the Apiaries Act, and thank Mr. Kirk for his address."

This was unanimously agreed to.

FREIGHT REDUCTIONS ASKED FOR.

Mr. F. C. Baines moved: "That the Conference send a deputation to the General Manager of Railways to ask him to reduce freights on honey to the same level as dairy produce."

Mr. Baines said that eight tons of honey could be stowed in the same truck as was required for five tons of butter.

The President said that the present freights on honey were reasonable at the time they were arranged, because honey was then sent out in small lots. Now it was railed in large lots, and they were entitled to reductions in freights.

The motion was agreed to.

The Conference rose at 5 p.m.

EVENING SESSION.

Mr. H. C. Baines, who exhibited some ingenious appliances, including two special feeders and a capping melter, read the following paper:—

Mr. Chairman—

The two appliances I have to bring before your notice will, I think, be of service to my fellow-beekeepers, and as both have caused favourable comment from professional men, including two Government inspectors, I thought that fact was sufficient guarantee to bring them before the notice of the Conference.

The first appliance is a feeder. We all know what feeding means usually—a sticky, messy job, great danger of starting robbing, bees demoralised, and the apiary generally upset. I have tried most methods, division-board Alexander, empty combs filled with syrup, etc., etc., all of which are more or less unsatisfactory. Personally I like the prineiple of the Alexander, but my chief difficulty has been propping the feeder up to the hive.

I had been working at an idea of a bottom board feeder, when I saw an illustrated article in "Gleanings" on what was called the Perfect Feeder. This was a feeder used in the bottom board, and fitted from the back, and as it was the idea I was after I made three shallow tin trays, with a sufficiently long lip to protrude beyond the hive at the back. By cutting out a 3-inch space on the deep side of my bottom boards, and fixing the small wooden cover with a hinged lid, I found the appliance acted admirably; all that was necessary was to have a float made of slats to prevent the bees drowning.

The advantages of the appliance are evident in the fact that you don't disturb a bee; the feed is right under the cluster, and the syrup is poured in from a watering-can at the back of the hives, without smoke or disturbance of any sort. The chances of robbing are small, as the syrup is right away from the entrance, and that is closed to a three-eighth space. I might state that I make two feeders from a kerosene tin. The kerosene case I use as flooring for the bottom boards. This appliance is worthy of your notice, is very cheaply made, and highly satisfactory in operation.

The next appliance is a Capping Melter. I think, Mr. Chairman, we've all experienced, particularly in our early days of beekeeping, the difficulty of what to do with our cappings. My first season I uncapped into a large box with perforated bottom, and allowed the cappings to drain. The cappings accumulated out of all proportion to my facilities for handling them, and there they were in all stages of draining, taking up valuable room. Some I put in the solar extractor, the slumgum clogging the screen, retarding melting, and spoiling the honey. At the end of the season, when all were rendered into wax, I had six 60-lb. tins of spoiled honey, which, had the honey not been spoiled, would have been worth between £5 and £6. I felt it was necessary to avoid this loss by the use of heat. It occurred to me that if I could get a double-jacketed tank made, having pipes running across so as to keep the cappings in suspension whilst the honey could get away, it would help to solve the difficulty. The very thing I was after came out in an illustrated article in "Gleanings" just about this time, therefore I cannot and do not claim this appliance as my own idea; I simply was working on the same lines. This was invented by a man named Severin, and all credit is due to him. The appliance is made of galvanised iron, and consists of a double-jacketed tank having 12 triangular tubes running across. The tubes are two inches high, and same at the bottom, spaced an eighth of an inch apart, set a quarter-inch above the bottom of the inner tank, the outlet being the whole width. The honey and wax receptacle is simply a tank with flaring sides, having a covered outlet about an inch from the top.

I will give you my method of extracting. My first job is to light my lamps under my melter and steam heated knife, and commence taking off the honey, which, if the combs are full and fat, means about 15 12-frame supers; if only moderate combs I take off 20. By this time the water is boiling in the melter, and I set the Gilson going on to my 4-frame extractor

and uncap four combs, fill the extractor, and partly throw out the first side. While this is being done, I uncap one comb, then reverse the extractor, and completely empty the reverse side of the combs, during which time I uncap two combs, then reverse the extractor again to finish the first side and uncap another comb, thereby having my four frames ready for loading the extractor. By the time I've emptied and refilled the extractor my melter has disposed of most of the cappings, and I start uncapping into a practically empty tank. This goes on the whole day, and one can handle without any great effort 12 to 15 cwt. Now, the question is, How does the honey fare? On purpose to find what temperature the honey ran from the melter, I placed a dairy thermometer in the honey and wax receptacle, and found the temperature of the honey from the first four combs while the melter was boiling came at 142 deg., but after that it did not go above 140 deg., which is a perfectly safe heat. The honey is discoloured but very little, and is all put into the storage tanks, not an ounce being spoiled, and the appliance thus pays for itself with interest the first year. If any further evidence is required that the honey is not in any way deteriorated, I may state that one man who uses an extra large melter, graded the highest points out of a shipment of 15 tons sent to England recently. The appliance was in operation at a field day held in my apiary last season, and one man wrote out a cheque for me to have one made; another had one made double size for two men to work at, and these have been lent to other beekeepers to melt up their cappings, and the general opinion is that it is one of the finest appliances ever given to beekeepers.

Now for the disadvantages of the appliance. The first is the heat, and it must be admitted there is a certain amount radiated which is perhaps a bit inconvenient, but by having wire screens in place of windows and the extractor going the whole time, I find very little trouble, and for my part I gladly put up with a little extra heat for the convenience of getting rid of the cappings.

The other disadvantage has occurred to me only, the other gentlemen using the same appliance not meeting the same difficulty. With me I found my honey very slow in granulating, which has occurred now for three seasons, during which time I've always used melters of different patterns. But this can easily be overcome, and will be dealt with in another paper.

MORNING SESSION—JUNE 19.

SAN FRANCISCO-PANAMA EXPOSITION.

Mr. M. O'Brien, secretary of the N.Z. Executive Committee for the San Francisco-Panama International Exposition, explained the conditions under which exhibits of honey could be sent to the Exposition.

The President thanked Mr. O'Brien, and said that the Association would probably send an exhibit, whatever individuals might do.

FOREIGN MARKETS.

ADDRESS BY MR. BUCKERIDGE.

Mr. G. H. Buckeridge, Chairman of Directors of the N.Z. Farmers' Co-operative Organisation Society, addressed the Conference on the subject of foreign markets.

As a result of his personal observations, he stated, he was of opinion that neither Fiji nor the Hawaiian Islands afforded a market for New Zealand honey. They scarcely expected to find a market in California, but he was agreeably surprised to find that experts in America said that the New Zealand honey, of which he exhibited samples, was the best they had ever seen. The duty on honey entering California was two cents a pound, and the prices obtainable were not remunerative. About 2¾d. per lb. was offered, but out of this freight and other charges would have to be paid. During a period of there weeks in the Old Country, he travelled through England, Ireland and Scotland. A letter he had received from a London firm indicated that the bulk of New Zealand honey should be sent to London, though small shipments might be sent to Liverpool. Outside London the demand for honey was limited. A letter from Liverpool stated that the demand there at present was for cases containing two tins of 60 lbs. each, but that it might be possible to develop the trade by advertising, and to pack the honey before it left New Zealand in smaller packages. He had also interviewed suppliers at Home, and pointed out to them that New Zealand supplies came to hand when the English market was depleted, so that it would be possible by utilising the import honey to maintain the trade all the year round. He was in a position to state that the Irish Agricultural Co-operative Association would undertake the marketing of New Zealand honey.—(Applause.) By selling through this Society New Zealand would get as close to the consumer as it was possible to get. The enquiries he had made as to the markets in the Old Country had been very disappointing to him. Honey was not in large demand as an article of diet, and it was a matter for serious consideration whether it would not be advisable to undertake an advertising programme in order to develop the trade. Most of the New Zealand honey sent Home at the present time was used for confectionery purposes. In order to develop the trade and get the best price honey must be popularised as an article of diet. In America a certain amount of honey was sold in "individual pots," containing one and a-half or two ounces, at a price of 15 cents. He was obtaining samples of these pots and the cost, and thought it possible that it might pay to pack honey in this way in New Zealand.

Answering questions, Mr. Buckeridge said that there was an assured market in Great Britain for all the honey that could be produced, but not at the price that was required.

Mr. Clayton said that it would be an absolute impossibility under the compulsory grading system to export one-pound packages or two-ounce jars.

On the motion of Mr. Gilling, Mr. Buckeridge was thanked for his interesting address.

THE EXPORT REGULATIONS.

Mr. J. S. Cotterell moved: "That this Conference recommends for the favourable consideration of the Agricultural Department that the export regulations re honey tins be amended to permit the use of raw linseed oil as optional to lacquering the tins."

Mr. Cotterell said that in his experience lacquering was a slow and costly process, and that the results were unsatisfactory unless the lacquering was done by an expert. Raw linseed oil, which could be rubbed on with a rag, was cheap, convenient and effective.

The motion was carried.

The following motions were also carried:—

"That this Conference recommends to the favourable consideration of the Agricultural Department that the export regulations on honey be amended to permit of liquid honey being exported in packages not exceeding 10 lbs. in weight."—(Mr. Cotterell.)

Mr. Edwards moved: "That the National Association urge the Department of Agriculture to consider the advisability of including Timaru as a grading port for honey."

Mr. Edwards said that there were some of the largest beekeepers in New Zealand down in this district (South Canterbury), and they felt that it would be a very great injustice if Timaru was not declared a grading port. Something like one hundred tons of honey had been produced in the district this season, and although only eleven tons had been exported, yet much more would be exported.

The motion was carried.

COMPULSORY GRADING ATTACKED.

A MOTION DEFEATED.

Mr. W. B. Bray moved: "That in the opinion of this Conference the inspectors could be employed more usefully in eradicating disease than in grading honey for export."

Mr. Bray said that by his motion he meant that the time for compulsory grading had not come yet. They had talked a lot about grading, and had approved of it in conjunction with a motion of thanks to Mr. Kirk on the previous day. He considered that that was rather an unfair advantage to take, because he could not oppose a vote of thanks. He had come up to bring this matter before the Conference, because he thought that beekeepers during the last two Conferences had been rather led away by all the talk about the benefits of compulsory grading. In his opinion compulsory grading was a sort of mirage. It had come to his knowledge that of a parcel of honey sent Home, the portion which was graded lowest fetched the highest price. He thought that a system of compulsory registration of brands would be much more effective than grading.

Mr. Clayton seconded. He maintained that grading had no commercial value whatever, and endorsed what Mr. Bray had said about low-grade honey fetching a higher price. He certainly thought that inspectors could be better employed than in grading.

Mr. Buckeridge said that the experience of the dairying people had been that grading built up the reputation of butter and cheese on the Home markets. Experience throughout the whole world showed that the more uniform the produce exported, the more chance there was of getting the best price for it.

Mr. W. E. Barker said that he was not in favour of doing away with grading, but the present staff could not do the grading properly and the inspection as well. More inspectors should be appointed.

Mr. Kirk said that it would be most astonishing if there were not a certain amount of opposition to the introduction of any new feature like grading. New Zealand had the best system of dairy produce grading in the world, and other countries suffered to an extent because their grading systems were not so good. It was true that the inspectors had too much to do, but the industry was not yet in a condition to justify the appointment of special graders.

Mr. Bray said that he hoped his motion would have the effect of making the Department "buck up" a bit. Producers had voluntarily submitted their honey for grading so far because they wished to learn the value of grading.

The motion was defeated, only three votes being cast for it.

MR. COTTERELL'S MISSION.

Mr. Jacobsen said that he had just found out that Mr. Cotterell was going to visit the San Francisco Exposition, and moved that he be appointed to represent the Association there.

Mr. E. G. Ward seconded the motion, and it was carried unanimously.

Mr. Cotterell said that he was going to San Francisco on private business, and would pay his own expenses. The National would be put to no expense in the matter. He hoped to get into touch with other Associations in California, and on his return would be happy to report to the Conference.—(Applause.)

The Secretary read a letter from the Minister for Railways refusing to grant reductions in the freights on honey, requested by a deputation from previous Conference.

(To be concluded.)

Correspondence.

(TO THE EDITOR.)

Sir,—Mr. W. E. Barker's letter in your first issue touches on one of the most important matters discussed at the recent Conference. Although it is not usual for a Government Department to air their views in an unofficial journal, this is a case where it is up to them to give us their side of the case. What is a beekeeper to do to prevent this efflorescence (to use Mr. Barker's word, which I consider exactly describes this so-called "scum")? If it is not literally scum, what are the graders' objections to it? Have the buyers at the other end complained of this? Because, after all, the honey must be graded to suit the buyers. Have the Department had any "scum" analysed yet to see whether it is normal honey or not. Out of close on four hundred cases we have had graded so far, there have been only a few tins which had a slight trace of efflorescence. We have extracted under varying conditions and varied the method of handling without any thought of avoiding efflorescence, and we are interested in seeing exactly what the Department recommend for the avoidance of this fault (?). On returning home I examined five cases which we had rejected by the grader; two were short weight through springing of lids, and the tins in the others were damaged.

Wishing the Journal every success,—I am, etc.,

W. B. BRAY.

(TO THE EDITOR.)

Sir,—I would like a little space to reply to Mr. W. E. Barker's letter re "scum," "efflorescence," or whatever one may choose to call it. Whatever the cause of its presence, I feel certain that the Department have done the right thing in refusing to grade honey covered with or containing too much of this so-called "scum." We as beekeepers must look to more than getting our honey on the British market. We want to feel sure it is not going to ferment after arrival Home. For over fourteen years I have noticed the various depths of "scum" in various tins of honey taken the same day. I have tinned from the small receiver under the strainer, not from a tank. I notice that more "scum" has generally appeared on honey taken after a few days' rain, showing that some of the honey was unripe and lighter or of lesser specific gravity, and therefore came to the surface, granulation only taking place or being borrowed as it were from the honey below. What has appealed to my mind and to my pocket also has been the difference in the length of time honey will keep with and without this so-called "scum." Let anyone take two tins of honey practically alike, except one contains half-inch of "scum," and the other without "scum," or, better still, has been re-liquified and skimmed. The former will probably commence to ferment before the next honey flow, whilst the latter will not show any sign of fermentation. I think were all honey run over a hot plate as it came from the extractor, it would be a great improvement to the keeping qualities, and we would have fewer dissatisfied customers.

Wishing our Journal every success,—I am, etc.,

E. J. PINK.

(TO THE EDITOR.)

Sir,—Heartiest congratulations on the floating of the Journal, the first number being tip-top, and I can see we're going to ease Conference of a lot of work by having a medium through which we can discuss matters appertaining to the industry.

I should like to second the remarks made by Mr. Barker in last month's issue re the so-called "scum," which isn't "scum." One of our most careful members, whose honey fetched top price last season in Liverpool, had about 20 tins turned down this year because of the so-called "scum," and he was naturally very much annoyed at being accused of sending honey that had "scum." He showed me a glass jar of honey that had almost a "marbled" appearance right through it, caused by the honey granulating in white streaks.

I should be one of the last to attempt to belittle the work of Mr. Kirk and his officers, but I honestly believe the graders do not know the cause or the remedy, because it was suggested the honey be liquified and re-tinned. That is no remedy, the same peculiarity recurring, as has been proved by the gentleman spoken of. Some of my honey granulated in this peculiar way and some didn't, so I'm hoping experiments will be carried out between this and the coming season both privately and by the Department, so that we may know that, after taking all reasonable care with our honey, we can be certain of it passing the grader.—I am, &c.,

FRED. C. BAINES.

Normanby.

(TO THE EDITOR.)

Sir,—I should like to know what is the best way to treat 80 Hoffman frames full of honey. It is too cold to extract now, and will not run. I was thinking of cutting the comb honey into pats and selling it that way. Can any of our readers give me any advice, which would be very acceptable.—I am, &c.,

Ashburton. F. W. LUNT.

(TO THE EDITOR.)

Sir,—The last year or two has marked some very important events in the history of New Zealand beekeeping, and I think every credit is due to those who have taken the leading parts. A strong National Association has been built up and export has been undertaken. The export of honey has meant a lot to beekeepers, for we no longer find our honey proving a glut on the market. Wishing the Journal every success,—I am, &c.,

DONALD McRAE.

Mr. Ireland (page 36) says: "Pressure in a deep tank makes the particles rise to the surface quickly." The great pressure near the bottom would prevent light particles of comb and scum from rising at all. Is this not so?—Editor.

The Bulletin Board.

MARKET REPORTS FROM FAR AND NEAR.

The Editor will be pleased to receive reports from beekeepers showing the prices ruling in each centre and the general conditions of the market. The information will be of great value to the Executive of the National in the development of the markets when their advertising scheme is put into operation.

Henry A. Lane and Co., London agents of the Farmers' Co-operative Organisation, through whom the National members exported their honey this season, report under date June 25th: "New Zealand white honey, special quality, 45/- per cwt; 2/56-lb. tins in cases." Under date July 2nd they quote: "New Zealand white honey, special quality, 46/- cwt. (in cases 2/56-lb. tins."

There is no change to report in the prices of honey, but there is a hardening tendency in beeswax, which is in good demand in all centres.

Honey should not be sold wholesale at prices less than from 4d. to 4½d. per lb. in bulk; 2-lb. tins, 1st quality, 11/6; 2nd quality, 10/6; 10-lb. tins, 4/3; glass and other packages, according to size and get-up.

MELTING UP COMBS.

(By Jupiter.)

Next to the pleasure of handling good bees comes the pleasure of handling good combs in good hives. For the present I want to say a few words about combs and comb melting. There are hundreds of beekeepers who, during the last few years, have gone in for the frame hive system. Very often the expenditure on foundation has been curtailed, or supplies could not be got quickly when swarming started, and the result is there are badly shaped and broken combs and too many drone combs, which all need to be sorted out for melting during these winter days. When sorting the combs, you will often find a brood comb that has not been built to the bottom bar. Trim off a quarter of an inch along the bottom so as to leave a raw edge, and when this is put in a super during the honey flow the bees will build up that raw edge and join it to the bottom bar in most cases. Now is the time also to do the wiring of the frames for the foundation if you wish to have good straight combs.

Probably there are too many beekeepers who waste as much wax as they get when melting up by using faulty methods. A small but important point is to use rain water in melting operations; artesian and river waters contain more or less lime, which saponifies the wax. To save all the wax, it is necessary to have a proper wax extractor. The Solar is very handy for odd bits of comb and even for cappings, but a proper hot water press, such as the Hatch, is the only means of getting all the wax from combs. It may seem an expense to a small beekeeper, but by the time he has melted 250 combs the extra wax obtained will pay for the press.

I have found that the main thing in using the Hatch press is to have everything hot, and to work quickly. Have the

combs ready cut out of the frames, and melt them in a copper of boiling water, then transfer the melted combs to the press. (Cold water must always be handy in case the wax froths up.) Then strain the wax through wire cloth into a clean tin, fill up with clean boiling water, and stand aside with a good covering of sacks. The slower wax cools the better and cleaner it becomes, and a better price can be obtained.

When sending wax away, pack it in boxes without any wrapping, unless you can get thick brown paper. Buyers complain that bagging or soft paper sticks to the wax and spoils the appearance of the cakes.

The Beekeepers' Exchange.

FOR SALE. | **WANTED.** | **TO EXCHANGE.**

ADVERTISEMENTS on this Page will be inserted at the rate of 2/- per 36 words per insertion.

WANTED, PARTNER for Apiary of 400 Hives; excellent Honey District; plant up to date, including Engine and Machinery for extracting and home appliance making; half or one-third share to suitable man.

Apply by letter, APIARIST,
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BUY A WAX PRESS, and save its cost in extra Wax you will get in rendering old comb. We can buy your Wax. Send sample, and state quantity.

BARRETT & BRAY,
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SUBSCRIPTIONS.

The following Beekeepers have forwarded the sum of 3/6 as their subscription to the Journal for the year ending June, 1914:—

O. Anderson, T. Abbott, S. Anthony, W. C. Brown, E. Buxton & Co., Brickell & Robins, J. Brock, Bristol & Dominions Producers' Association, A. Baker, H. Bryans, A. Bentley, Barrett & Bray, W. Cattermole, J. S. Cotterell (21/-), A. Chave, E. Clark, J. Cooper, L. D. Carter, D. Cameron, W. A. Dawson, Gordon Edwards, A. F. Ellwell, E. H. Eccles, Geo. Flanagan, Chas. Fogden, J. C. Gibb, R. C. Groom, J. Gracia, E. Goodall, C. Grainger, T. Hopkins, J. Irving, C. A. Jacobsen, Miss James, R. Laing, L. Le Comte, J. Le Lavie, A. L. Luke (3 years), Wm. Lyall, J. E. Lord, Miss Mackay, J. Maitland, J. A. Moreland, Myers & Co., J. Mullions, J. A. Moore, H. Y. Munro, R. A. Meek, Miss McCrae, C. F. McGregor, J. Nathan, C. A. Oldman, Mrs. J. Press, E. J. Pink, W. Parrant, Pearson Bros., M. A. Penny, J. Ross, W. Rossiter, J. Rentoul, T. A. Stewart, W. Saunders, J. Schmidt, R. Smith, Mrs. Stewart, A. C. Toshach, A. B. Trythall, W. Hooper Teed, C. Unwin, G. T. Watkin, Wairarapa Farmers' Co-operative Association, T. White, G. R. Willis.

Mr. Isaac Hopkins, Owens Road, Epsom, Auckland, would be glad to receive a copy of a publication issued about 1888 by the late T. G. Brickell and himself, entitled "Food Value of Honey." The pamphlet is about 9 x 6, with a pink cover.

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THESE ARE THE BEES THAT FILL THE SUPERS AND THE POCKETS.

SAFE ARRIVAL GUARANTEED.

PRICES. Cash with order.		1.	2.
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2 Frame (Nucleus Colony) ... ... **Each—10s.**
3 ,, ,, ,, ... ,, **12/6.**
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Full Colony on 10 Frames ... ... **£1 1s.**

To the above prices must be added the price of the Queen required.

BEES Free from Disease. and bred from good stock. All care taken to ensure safe transit, but no responsibility taken with the colonies. I will, however replace a dead queen, from the mail, if the box is returned intact.

TERMS—CASH WITH ORDER. W. A. DAWSON, FORTROSE, SOUTHLAND.

THE "DAWSON ENTRANCE FEEDER."

The most Economical Feeder to use.
Saves TIME, LABOUR, & EXPENSE. Three great factors of importance to the Bee-keeper.

Some Facts about this Feeder.

- It can be adjusted for use in one minute.
- Is perfect working when in use, and costs little.
- Does not admit robber bees easily.
- Is not a hindrance to the honey-gatherers, and makes a little sugar go a long way.
- One hundred Colonies can be fed in as many minutes.

Try one on each hive. Feed a little each morning early with a syrup of "two of water to one of sugar," and see how the bees will forge ahead to the point of storing a surplus in most cases.

PRICE - 1/8 Each. Per Doz. - 18/-.

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