



E. A. Gair

The New Zealand Beekeepers' Journal.

SEPTEMBER 19th, 1914.

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



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



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.

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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.

[September 19th, 1914.]

The New Zealand Beekeepers' Journal

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

No. 3

DUNEDIN.

3/6 PER ANNUM.

Important!

250 Additional Subscribers

are required right away.

IT is generally admitted that the issue of a Bee Journal in the interests of the Honey Producers of the Dominion is a necessity at the present juncture.

Do YOU THINK SO?

If we are to continue this Magazine, we must enrol 250 more subscribers before the 10th of October!

Will you send your Subscription on the form enclosed in the Magazine without delay.

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We appeal to every Bee-keeper who appreciates the Journal to do a little canvassing among his friends and try to secure TWO Subscribers. If all our readers will do this, the difficulty will be overcome and a continuation of publication assured.

Work of the Month.

By JAMES ALLAN.

The Editor has asked me to contribute to our Journal under the above heading, and I esteem it a favour to be permitted to do so.

Our Journal is published in the latter half of the month, consequently to be of any use, it is October work that should be the theme of this contribution. It will, however, make but little difference if I group the spring months, and speak of spring work.

To begin with, I feel upside down, or, at all events, down below. Away north about 1,000 miles there is a village called Hamilton, and the beekeepers round there will be extracting when we are only putting on our supers.

The first work of the spring, naturally, is to find out the condition of the bees. From experience, I find it a good thing when closing down in the autumn to weigh the colonies and register the weight on the back of each hive. It is quickly done, and gives a sense of satisfaction when it is done. Our method is to put the scales on the apiary barrow, and wheel in behind each hive in turn. We then lift aside the cover, and put the hive body, containing the colony and its stores, on to the scales, the result being registered on the back of the hive. A good deal of equalising is done after the weighing, and the alterations noted. When it comes to the first examination in spring, the record on each hive has great value, as indicating where the most needy colonies are likely to be found. A greater value, however, lies in this, that it is an education in the winter requirements of the apiary.

I do not advocate much interference with the bees in early spring, but as soon as the suitable day comes after the middle of August, I want a run through to pick out those that are queenless and those that are in danger from want of stores. By that time breeding has begun in all the colonies, and consequently queenless colonies are easily picked out. I place no value on the remaining bees of a queenless colony, but their stores are useful to help light colonies.

Spring feeding ought not to be necessary. When, however, it has to be done, the best food is a quantity of sealed combs of honey held over for that purpose from last season. If syrup has to be given, it should be the two of sugar to one of water formula, or as much sugar as the water boiling will melt, and it should be fed in ample quantity quickly, so as not to induce abnormal brood-rearing. It should always be remembered that feeding for stores and stimulative feeding are two quite different things. The former is done to a colony that is too light and in danger of starving in order to refurnish its larder and keep it normal. The latter is done to a colony that is well furnished in order to induce brood-rearing. The giving of a small quantity of thin syrup daily induces greater activity in the hive, and if done for, say, four weeks preceding the expected honey flow, means a much increased population to gather in the harvest. My advice is to go slow on this proposition, as it requires a good deal of experience.

PREPARING FOR THE HONEY FLOW.

By J. IRVING (Albury).

Success in securing a crop of honey depends largely on the care that is given the bees during spring and early summer. In this article I give briefly my method of management up to the commencement of the main honey flow. The dates given may vary two or three weeks, according to the season.

About the 1st of April the colonies are left with from 30 to 35 lbs. of honey each, and all weak colonies united, so there is no need to open them before September. The first five days in September the colonies are all examined. I lift the cover from the hive, turn it upside down, and set the hive body in it while cleaning the bottom board and clearing the weeds away from the entrance. Next I lift out each frame separately and calculate the amount of honey, keeping watch at the same time for any signs of foul-brood. After the frames have been returned to the hive, two or three thicknesses of sack are spread over them and the cover replaced. The amount of honey in the hive is marked on a piece of section that I keep in a tin pocket nailed to the back of the cover. Any that have less than 15 lbs. of honey are given combs saved over from the previous season, or, failing these, sugar syrup. If any colonies are found queenless, they are united with the weakest colonies having queens. All work with the bees at this time of the year is done on warm days, between 10 a.m. and 3 p.m., and if the bees are inclined to rob at any time, I use a bee tent while working with them, using as little smoke as possible. When too much smoke is used robbers will attack the colony after the tent is taken away.

About the 15th October I go round all the colonies again and see that each has at least 10 lbs. of honey, examining every frame carefully for foul-brood. Any colony that shows the least sign of the disease is to be shaken on to foundation before the super is put on.

Some apiarists recommend giving a super of foundation at this time, but I think this is a great handicap on the bees in this locality. If a super of empty combs is given without queen excluder, the bees will spread their brood and build up very rapidly; many of them will require a second super in November.

From the 1st November, given fair weather, the bees will gather enough from natural sources to supply their daily needs, but if the weather is unfavourable they require watching very closely. With so many young bees and such a large amount of brood, they consume the honey much faster than they do earlier in the season. The bees commence building queen cells for swarming early in November, and for this month I go through all colonies once every ten days and cut out all queen cells. All queens are clipped, and if any swarms come out they return where they come from. A board is fitted from the front of the bottom board to the ground so that the queen can return with the swarm if nobody is at hand to take care of her. I have thirty nucleus hives, holding three frames each, and for these I raise queen cells from the best breeding queen. The young queens, as soon as they commence to lay, are used to replace those that are failing.

At the commencement of the main honey flow, from clover

in December the queen is placed in the lower storey, a queen excluder put on, and over this a super of empty combs or sheets of foundation, and on top of this the other storey containing most of the brood. Foundation given at this time will be drawn out into comb in three or four days during a good honey flow, but it should be well fastened in the frames, or it will break down with the heat and weight of the bees. The spur wire embedder is bad for weakening the foundation; a better plan is to take a piece of half-inch round iron about eight inches long, taper the point, and file a groove in it to trace the wire. Heat the point over a lamp while fastening the foundation to the top bar of frame, then draw it lightly over the wires, and it will melt the foundation enough to fasten it to the wire. A few drops of melted wax on the ends of the wires will keep them from breaking away from the foundation.

[The methods Mr. Irving uses are good, and particularly that of giving an extra super of combs without an excluder until the flow. Mr. C. A. Jacobsen, Little River, could add something to this. We trust he will do so, as it is in line with his methods.—Editor.]

INDIVIDUALISM v. COLLECTIVISM.

By E. G. WARD.

I believe that the greatest problem confronting the beekeeper at the present time is the question of a market for his product, and the only way to tackle this problem is by collective action. The bad old way of each one paddling his own canoe has had its day, and must give place to modern ideas. The present day commercial methods are all in the direction of collective management, and the establishment of Co-operative Associations in so many departments of industry is a proof that the principle of collective trading is regarded as sound.

An organisation has been established in Taranaki which will, I believe, be a solution of our difficulties. This Association is a "nucleus," and by adding "frames of brood" can soon be built up into a good strong colony ready for next season's honey flow. In other words, I think that, instead of each district or province taking up the question on its own, it would be to the best interests of all to form branches in all the principal parts of the Dominion, and so form a Co-operative Association to embrace the whole of New Zealand. At the late Conference the situation was discussed between the Taranaki, Waikato, and Canterbury delegates, and it seems now that all that is required is to make the subject as widely known as possible and as soon as possible.

The advantages of an Association of this kind are:—

First.—The competitive element is done away with.

Second.—All profits will go into the pockets of the producer in the form of bonuses, the place where the profits should go.

Third.—Goods of every kind required can be bought in quantities, and a saving made in this direction.

Fourth.—The producer will be relieved of the trouble of finding a market. This will be the work of the management, as, instead of a dozen or more wasting time canvassing, one man would represent the whole of the beekeepers of a district.

Fifth.—The financial bugbear will be eliminated, as arrangements will be made to pay cash, and full value will be guaranteed to shareholders.

The whole question of marketing will be left to those best qualified to deal with it, and the work of honey production will be left to the practical beekeeper.

The question of details is now under consideration, and I trust that before another issue of the journal appears we shall be well on the way of establishing this useful institution.

Let it be clearly understood that this is not a get-rich-quick scheme, but it will assure us a fair return for our labour.

Finally, fellow-beekeepers, I would urge you to get busy and help us all you can. Don't wait to see what we are going to do for you, but wade right in yourself. Get into touch with the Secretary of your local Association or the promoters of the co-operative movement.

THE GENERAL SECRETARY ON TOUR.

Leaving Dunedin by the fast mid-day express, I had the pleasure a few days ago of visiting Geraldine at the invitation of the Geraldine Beekeepers' Association, and addressing their meeting in the evening. The beekeepers present gave me a most attentive hearing, and asked quite a number of questions. They seemed satisfied with the work the National has undertaken, and as reasonable business men they seemed to agree that they cannot afford to remain outside the National any longer. Notice of motion was given that the Geraldine Beekeepers' Association become a District Branch of the National at its annual meeting, the first week in September. Geraldine is particularly favoured from a beekeeper's point of view, and is one of the best, if not the very best, honey-producing centre in the Dominion. Some of the beekeepers stated that they had not had a failure for ten years, and crops of an average of 170 lbs. are quite common. During my short stay I was most hospitably entertained by Mr. and Mrs. South and Mr. Edwards.

Leaving Geraldine, I visited Akaroa district, and had the pleasure of meeting some of the leading beekeepers in this delightful district. The district is a very large one, and those beekeepers who attended have very long distances to travel. Mr. J. C. Cooper walked over the hill from Menzies Bay, a distance of fifteen miles each way. This would suggest a certain amount of enthusiasm. Nearly all the beekeepers in the district have joined our Association, or have expressed their intention of doing so in the near future. Banks Peninsula is of peculiar formation, being in the form of small basins, or "bays," as they are called, each capable of running from 100 to 200 colonies of bees. The trip over is made from Little River (the end of the railway line) by powerful motor cars, and the view from the top of the hill, where the first glimpse of the bays is obtained, is particularly fine. Beekeepers who attended the last two Conferences will regret to hear that our friend, Mr. Elliott, has been seriously indisposed for some time, and will join with me in wishing him a speedy return to health. My hosts in the district were Messrs. Barrett and Bray, at the "Bachelor's Rest."

IMPROVING OUR BEES.

By I. HOPKINS.

The whole trend of modern practice with regard to the cultivation of our domestic animals, of whatever kind, is towards improvement by select breeding. Never before was it so generally realized that to jettison along with inferior strains, be they of sheep, cattle, horses, bees, etc., while one's competitors are adopting every means to improve theirs, is to court failure sooner or later. Competition is getting so keen nowadays that the person who does not strive to keep in the front rank of his calling will soon fall behind and be pushed aside. However good the strain of animal we may have at any given time, we should not be satisfied to halt at that, but be ever on the alert to improve it. We are getting nearer every day to the time when commercial beekeepers will of necessity have to adopt all the short-cuts possible to reduce expenses in their business, and, as everything in the first place depends on the energy and vigour of the bees under cultivation, it goes without saying that the quality of our bees must receive the first attention.

That it is possible for any intelligent and careful beekeeper by select breeding of queens every season to improve his bees, so that he will in a few seasons have a much superior strain to that he started with, has been amply proved in America and elsewhere, and I think I may lay claim to having fully demonstrated this fact at the late Government queen-rearing apiary. I contend that it is just as important to the beekeeping industry to raise a superior strain of bees as the raising of a superior herd of dairy cows is to the dairying industry.

Queen-breeding with a view to improving one's bees and working up a superior strain requires very great care in selecting the breeding stocks, both for queens and drones. Unless a judicious selection is made, the result may be the opposite of that desired. The first essential is that the beekeeper should obtain two or three or more queens from some reliable and experienced breeder. I mean, of course, Italian queens. Then purchase a selected breeder from another reliable queen breeder, and don't begrudge paying a little extra for your breeding stock, which you require as the foundation for the superior strain of bees you are aiming to raise in the future. Be satisfied with these; raise your queens from eggs from the special breeder, and as many drones as possible from the others. After re-queening the apiary with their progeny, keep a strict record of the characteristics and performances of each colony, and choose your best each season as breeders for the following seasons, culling out without mercy all queens that do not approach the standard of your best. This is the method, and the only one by which you can expect to bring all your colonies up to high level of efficiency. Don't be afraid that by so doing you will be breeding too much in-and-in. It is my opinion, judging by the methods employed in cattle, sheep, and horse-breeding, that one can go on breeding in like manner for eight or ten years in the apiary before an out-cross will be needed.

The greatest mistake our beekeepers have made in the past has been the craze to get "new blood" (fresh queens) into their apiary every season or every second season. It was simply impossible to work up a good strain of bees by that means, for before one lot could be tested another lot of "new blood" was introduced.

With regard to the methods of queen-rearing, mine has so often been told that I need not repeat it here. I need only say that I am totally against the transferring of larvae. I have proved by results that queens raised in very strong two-storey colonies, where there are many thousands of nurse bees, and the cells built over eggs, so that the special treatment necessary to produce queens may proceed from the egg stage, are far and away ahead of those reared under the transferring of larvae plan; in fact, there is no resemblance in qualities between the two.

In conclusion, I am pleased the National Association has adopted so wise a course as to press upon the Department the importance of establishing the queen-rearing apiary, and I have little doubt but that it will come about some time in the near future.

FOUL BROOD AND OTHER DISEASES OF BEES.

(Extract from Thirteenth Annual Report of the Illinois State Beekeepers' Association.)

Foul brood—*bacillus alvei*—is a fatal and contagious disease among bees, dreaded most of all by beekeepers. The germs of disease are either given to the young larval bee in its food when it hatches from the egg of the queen bee, or it may be contagion from a diseased colony, or if the queen deposits eggs, or the worker-bees store honey or pollen in such combs. If in any one of the above cases, the disease will soon appear, and the germs increase with great rapidity, going from one little cell to another, colony to colony of bees, and then to all the neighbouring apiaries, thus soon leaving whole apiaries with only diseased combs to inoculate others. The island of Syria in three years lost all of its great apiaries from foul brood. Dzierzon, in 1868, lost its entire apiary of 500 colonies. Cowan, the editor of the British Bee Journal, recently wrote: "The only visible hindrance to the rapid expansion of the bee industry is the prevalence of foul brood, which is so rapidly spreading over the country as to make bee-keeping a hazardous occupation."

Canada's foul brood inspector, in 1890 to 1892, reported 2,306 cases, and in a later report for 1893 to 1898, that 40 per cent. of the colonies inspected were diseased. Cuba is one of the greatest honey-producing countries, and was lately reported to me by a Wisconsin beekeeper who has been there, and will soon return to Wisconsin: "So plentiful is foul brood in Cuba that I have known whole apiaries to dwindle out of

existence from its ravages, and hundreds more are on the same road to sure and certain death. I myself took in 90 days in Cuba 24,000 lbs. of fine honey from 100 colonies, but where is that apiary and my other 150-colony apiary? Dead from foul brood." Cuba in 1901 exported 4,795,600 lbs. of honey and 1,022,897 lbs. of beeswax.

Cuba at present has laws to suppress foul brood, and her inspector is doing all possible to stamp the same from the island.

Even in Wisconsin I know of several quite large piles of empty hives, where also are many other apiaries where said disease had gotten a strong foothold.

By the kindness of the Wisconsin beekeepers, and, in most cases by their willing assistance, I have during the last five years gotten several counties free of the disease, and at the present writing (March 12th, 1902) have what there is in Wisconsin under control and quarantined. This dreadful disease is often imported into our State from other States and countries, so we may expect some new cases to develop until all the States shall enact such laws as will prevent further spread of the same. Arizona, New York (1899), California (1891), Nebraska (1895), Utah (1892), Colorado (1897) have county inspectors, and Wisconsin (1897) and Michigan (1901) have State inspectors. The present Wisconsin law, after five years of testing and rapid decrease of the disease, is considered the best, and many other States are now making efforts to secure a like law.

There are several experimental apiaries in Canada, under control of the Ontario Agricultural College; also a few in the United States, especially in Colorado, that have done great work for the beekeeping industry, and their various published bulletins on the same are very valuable. The Wisconsin State Beekeepers' Association has asked that an experimental apiary might be had on the Wisconsin Experimental Farm, but at present there are so many departments asking for aid that I fear it may be some time before bee culture will be taken up.

Causes of Foul Brood.

1. Many writers claim foul brood originates from chilled or dead brood. Dr. Howard, of Texas, one of the best practical modern scientific experimenters, a man of authority, has proven beyond a doubt that chilled or common dead brood does not produce foul brood. I have in the last five years also proven his statement to be true in Wisconsin, but I do believe such conditions of dead brood are the most favourable places for lodgment and rapid growth of disease. Also, I do not believe foul brood germs are floating in the air, for, if they were, why would not every brood-comb cell of an infective hive become diseased? I believe that this disease spreads only as the adult bees come in contact with it, which is often through robber-bees. Brood combs should not be removed from any colony on cold or windy days, nor should they be left for a moment in the direct rays of sunshine on hot days.

(To be continued.)

NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND.ANNUAL CONFERENCE, 1914—*Concluded.***DISTRICT BOUNDARIES.**

Mr. Brickell raised the question of altering the boundaries of the districts allotted to the four departmental inspectors. At present, he said, the work was not evenly divided, and the boundaries should be adjusted so that each inspector would have something like an equal amount of work to do. He moved: "That the Department be asked to alter the district boundaries."

Mr. Buckeridge suggested that they should ask for another inspector.

Mr. Moreland seconded the motion.

Mr. Kirk said that it was necessary in fixing boundaries of districts to take into consideration the distances the men had to travel as well as the amount of work to be done. There was no doubt that more men were wanted.

Mr. Jacobsen moved as an amendment: "That the Government be asked to appoint one or two additional inspectors."

Mr. Ward seconded.

Mr. Baines suggested that skilled beekeepers might be appointed as district inspectors.

Mr. Clayton said that the present inspectors should be relieved of a lot of their outside work, such as judging at shows and helping to prepare show exhibits.

Mr. Jacobsen said that local inspectors could do the work until more departmental inspectors were put on.

The amendment was carried by 20 votes to 5, and was then put and carried as the substantive motion.

PURE FOOD REGULATIONS.

It was agreed, on the motion of Mr. Brickell: "That the regulations under the Sale of Food and Drugs Act be referred to the incoming Executive to take any necessary action."

The Conference adjourned at 12.15 p.m.

When the Conference resumed at 1.45 p.m., Mr. A. Ireland read a paper.

SPECIALISATION.

To illustrate what I mean by specialisation, I will take the dairy industry. At one time every farmer made his own butter, when all grades of butter were manufactured, from "cart grease" to finest dairy. The price was about 6d. per lb. in the summer, the same price for all grades. When the making of butter was specialised by being made in factories there was only one grade of butter made—the very best—and the price was more than doubled. No dairyman, or even anyone keeping one cow, is allowed to sell milk unless they observe certain strict regulations.

I think that the beekeeping industry should be brought under somewhat similar restrictions. There should be compulsory registration of apiaries, and no beekeeper should be allowed to sell honey unless he be registered, and comply with such other conditions as are necessary. So long as anyone can keep bees, harvest the honey, and put it upon the market under conditions that are unsanitary, not to say filthy, so long will there be a brake upon the expansion of the consumption and upon the price of honey. I have seen honey in auctioneers' sale-rooms; the outsides of the tins were dirty, and the contents in no better condition. The producers of this class of honey sell at any price they can get. This tends to reduce the prices, and the poor quality gives consumers a distaste for honey. If anyone wishes to keep bees to provide honey for his own use, he should be allowed to keep them without registration. I have no doubt that registration will put out of the business a number of small apiarists, and tend to confine the industry to more expert beekeepers. The small beekeeper is the great drawback to the development of our industry. As a rule he will not join a Beekeepers' Association, subscribe to a bee journal, or purchase any bee literature, and as a consequence is behind the times. The money he receives for his honey is a matter of small moment to him, so he often sells below market value. Quite a number of these small men still resort to the old method of straining their honey in conical bags, comb and brood both being cut up, and the mixture put upon the market as honey. It happens sometimes that the combs are diseased, and, after being strained, are put out for the bees to regather the honey, so disease is spread over the neighbourhood. A man who produces butter or milk is not allowed to do anything of an insanitary or objectionable nature. But a beekeeper may do any or all of the things I have mentioned. I think that the bee inspectors ought to have authority to inspect honey houses and places where honey is extracted, the plant and utensils that are used, and have power to condemn such as he considers unfit.

We are out now for the purpose of developing the export and local trade in honey, and it behoves us to put our houses in order so that we may produce the best possible article. This can only be done by regulations, for there are always some men in every industry who are careless and unmethodical in their work. These men have either to be compelled to do things under approved methods and conditions, or else go out of the industry. If we really intend to increase and develop our export and local trades, we cannot afford to let all and sundry make ducks and drakes of it. We must get our regulations in operation without delay.

There may be some who may think that the recommendations in this paper would interfere with the liberty of the subject. The more highly a people are civilised, in the same proportion is the liberty of the subject curtailed. Barbarism means that each subject has liberty to do anything he likes, and do it his own way. One of the principal factors in the development of any industry is to get the product as uniform in quality as possible. It may be said that the regulations will inflict hardship on certain individuals. It is safe to say that there

never has been an Act passed but imposed some hardship. The object is to produce the greatest good to the greatest number.

Before bringing this paper to a close there are two matters on which I should like to make a few remarks. First, in the cards of instruction sent out by the National Association and also by the Canterbury Association, the time recommended for the honey to remain in the tank for the scum to rise is too short. Five days to a week is needed. Second, tanks. In most cases these are too shallow. A deep tank is better. A large surface of the honey exposed to the action of the atmosphere allows the aroma to evaporate, also the best part of the flavour of honey. A deep tank causes the scum and particles of comb, etc., to rise to the surface sooner. I notice that Mr. Holterman, of Canada, uses tanks 6 ft. deep. The pressure in a deep tank by gravitation forces anything that is lighter than honey to rise to the surface sooner than in a shallow tank, in which there is not much pressure.

I copy the following from the May number of "Gleanings in Bee Culture" (page 332):—"If all beekeepers were taught how to obtain honey as good as the bees can make, the average quality would be better, more dependable, and more desirable than that which is produced in ignorance of best methods. Beekeepers well schooled in their occupation know more of markets and are better advertisers and salesmen than those of lesser knowledge. Unschooled, untutored, and ignorant owners of bees are the real menace, and it is this class of beekeepers who harbour infectious bee diseases and are instrumental in spreading them, and who demoralise markets.

DEPUTATION TO THE HON. R. H. RHODES.

During the adjournment a deputation representing the Conference, and consisting of Messrs. J. Allan, J. S. Cotterell, and C. A. Jacobsen, waited upon the Hon. R. H. Rhodes (in the absence from town of the Right Hon. W. F. Massey, Minister of Agriculture).

Mr. Cotterell brought under the notice of the Minister a resolution carried by the Conference to the effect that the Government be asked to establish an apiary for the rearing of queen bees in the Cook Islands, from which apiarists in New Zealand could be supplied with "queens" at cost price. He explained that the vitality, industry, and productiveness of colonies of bees were much enhanced by re-queening regularly every spring. This, however, apiarists were now prevented from doing because they could not get queen bees at this season except from America, and at very high prices. It cost about 10s. 6d. to import a queen bee from America, and the cost of incubating them locally or at Rarotonga should not be more than 1s. each. Owing to the tropical climate of the Cook Group it would be possible to produce queen bees there all the year through, and, if they were available to apiarists at cost price, the output of honey would be more than doubled in two seasons. At present the output per year was estimated to be worth about £50,000.

Mr. J. Allan and Mr. C. A. Jacobsen supported Mr. Cotterell's request, and urged also that the apiary at Ruakura should be put under the control of a qualified officer of the Orchards and Apiaries' Section of the Department of Agriculture.

The Minister stated in reply that the deputation must understand that he could make no promises, but he would have much pleasure in passing what they had said on to Mr. Massey. The deputation had shown him that the output of honey in the Dominion could be doubled, and the increase would go to swell our exports. This made the matter an important one, and he believed that it would receive full consideration.

Mr. Allan also asked that at least one other inspector should be added to the staff of the Apiaries Division of the Department to cope with the increasing work.

Mr. Rhodes replied that he would refer this question also to Mr. Massey.

Mr. Cotterell reported, on behalf of the deputation, that the Minister had received them favourably, and promised to convey their representations to Mr. Massey. Mr. Allan also reported that the Minister had promised to refer the request for the appointment of an additional inspector to Mr. Massey.

THE CONFERENCE OF 1915.

The President mentioned that an invitation had been received from the Manawatu A. and P. Association to hold the next Annual Conference at Palmerston North. Mr. Kirk had suggested that the Conference should meet alternately in the North and South Islands, and that the meetings should alternate with those of the Fruit-growers' Conference.

After discussion, it was agreed that the next Conference should be held at Wellington at about the time of the King's Birthday, so that delegates might have the advantage of cheap railway fares.

MR. HOPKINS' DEPARTURE.

Mr. Cotterell said he was given to understand that Mr. Hopkins was about to leave New Zealand to live in the Old Country. The Association should tender Mr. Hopkins some recognition. He moved:

"That this Association, in the name of all the beekeepers in the Dominion, put on record their appreciation of the most valuable services rendered by Mr. Hopkins to the beekeeping industry in New Zealand, and trust that he be spared for many years in the Old Country. And we recommend all the Beekeepers' Associations in New Zealand to invite shilling subscriptions from all beekeepers in their districts towards some recognition of his services."

Mr. Hutchinson (who seconded) and Mr. Ward heartily supported the motion, and it was carried by acclamation.

THE AMENDED CONSTITUTION.

Mr. Brickell reported, on behalf of the Committee set up to amend the incorporated amendments to the constitution, the following amended constitution, which was unanimously adopted:—

CONSTITUTION OF THE NATIONAL BEEKEEPERS' ASSOCIATION.

1. The organisation shall be known as the National Beekeepers' Association of New Zealand.

2. The object of the Association shall be the improvement of the beekeeping industry, furthering the interests and the prosperity of the beekeepers throughout the Dominion.

3. Membership shall be extended to any beekeeper who is in accord with the aims and objects of the Association, and who pays an annual subscription on the following scale:—

Up to 15 col. 5/-

Up to 50 " 10/-

Up to 100 " 15/-

Up to 200 " 20/-

and 5/- for every additional 100 or portion thereof. Hon. members' subscription shall be £1 1s. per annum.

4. District Branches of the Association may be formed where there are seven beekeepers desirous of forming such a branch. The General Secretary shall provide such branches with reports of the meetings of the Executive, pamphlets, and other printed matter which may be published from time to time.

(a) It is specially provided that any existing Association may automatically become a District Branch of the National by the passing of a formal resolution adopting the National constitution subject to the provision of clause 3.

(b) The District Secretary shall collect all fees due by members of his Branch, and remit to the General Secretary a portion of the fees on the following scale:—

Up to 25 members: three-quarters of the fees collected.

Up to 75 members: One-half of the fees collected.

76 members & upwards: One-quarter of the fees collected.

5. The Executive shall consist of a President, Vice-President, Secretary-Treasurer, and four members (two being from each island), who shall be elected at the Annual Meeting. Should any vacancy occur during the year the Executive shall fill the vacancy. The duties of the Executive shall be:—The general control of the Association's business in furthering the interests of the Association; the publication of reports; advertising and marketing of honey, and any other business which may be deemed advisable in the general interest of members.

6. The President shall preside at all meetings of the Executive, and also sign all cheques. He shall have a deliberative as well as casting vote.

7. The Vice-President shall occupy the chair in the absence of the President, and in the event of the office of President becoming vacant he shall act until a new President is appointed.

8. The General Secretary-Treasurer shall collect all money due to the Association (except as is provided in section (b),

clause 4); keep such books and accounts as the Executive may require; countersign cheques; conduct the correspondence; keep the minutes of the meetings, and do any other such work as is necessary or the Executive may direct; he shall also write the Annual Report and prepare the Balance Sheet, which must be signed by the Auditor.

9. The Annual General Meeting of members shall be held in June or as near thereto as may be deemed advisable for the purpose of receiving the Report and Balance Sheet, the election of Office-bearers, and the appointment of Auditors for the ensuing year, the discussion of any subjects of interest to the beekeepers which may be brought forward, and general.

10. It is specially provided that should any question arise which in the opinion of the Executive should be decided by the members, they shall issue to each member of the Association and to the Secretary of all local Branches a clear statement of the position, and provide a voting paper so that members may vote on the question by mail. The voting shall close not less than thirty days from the date notices are posted. The voting paper shall state the date on which the poll shall close.

(b) At the Annual or Special General Meeting delegates may represent the District Association, and vote on the following terms:—On all questions of which notice of motion have been given, the delegate or delegates may exercise one vote for every financial member of their Branch.

11. This constitution may be amended or dissolved at any Annual or Special General Meeting called for that purpose, provided that sixty clear days' notice of the proposed amendment or dissolution be given by circular calling the meeting to each member of the Association and to the local Branches.

THE BEE JOURNAL.

SECRETARY'S PROPOSAL ADOPTED.

Mr. E. G. Ward reported for the Committee set up to consider the establishment of a Bee Journal that, having met and considered the figures submitted by Mr. Brickell, the Committee had no hesitation in recommending that the publication of the journal be undertaken provided 500 subscribers could be obtained. The figures placed before them by Mr. Brickell were quite satisfactory, and it appeared that they would make a financial success of it if each one did his level best to get subscribers.

On the motion of Mr. Cotterell the Committee's report was unanimously adopted.

THE CONFERENCE PROCEEDINGS.

Mr. Kirk said that the Secretary for Agriculture had authorised him to say that a grant of £20 would be made towards the cost of printing the report of the Conference.

On the motion of Mr. Baines, a vote of thanks to Mr. Kirk for his assistance in getting the grant was carried by acclamation.

RAILWAY FREIGHTS.

On the motion of Mr. Clayton the question of railway freights generally was referred to the incoming Executive.

ELECTION OF OFFICERS.

The office-bearers for the past year were all re-elected:— President, Mr. Jas. Allan; Vice-President, Mr. J. S. Cotterell; Secretary-treasurer, Mr. R. W. Brickell; members of the Executive representing the North Island, Messrs. S. Hutchinson and H. W. Gilling; members of the Executive representing the South Island, Messrs. C. A. Jacobsen and A. Ireland; Auditor, Mr. F. C. Baines.

MR. ISAAC HOPKINS FAREWELLED.

The President informed Mr. Hopkins that, in his absence, the Conference had passed a resolution expressing appreciation of the services which he had rendered to those engaged in the beekeeping industry.

Mr. Hopkins: I can only thank you very sincerely. My time now in New Zealand will be very short. I hope to be at Home before this time next year. As regards the work, my effort has always been to advance the welfare of the individual beekeeper, and, consequently, of the industry. This is my fortieth year in beekeeping and my fiftieth year in New Zealand. I am now in my seventy-eighth year, and in the ordinary course of things I cannot expect to be much longer on this planet. I am glad that the work I have been able to do is appreciated. Of course, when anyone came prominently before the public and met many people, some misunderstandings would arise, but what he had struggled for he was glad to see now. The industry was placed on such a footing that it could never go back. He would always keep in touch with it as long as he was alive; he hoped to communicate with a few of them at all events, and would always be on the lookout for what was going on.

Mr. Kirk said that there was no more enthusiastic beekeeper in New Zealand than Mr. Hopkins, and the work that he had done had received appreciation throughout Australia and in America and England, as well as in this country. In fact, Mr. Hopkins was known wherever beekeeping was known.

GRADING.

After the ordinary business of the Conference was over, Mr. Bowman, one of the Departmental graders, gave a demonstration of honey grading. He said that "scum" was a term of very wide meaning, covering anything that might rise to the surface of the honey. It might be only fine air bubbles, and was classed as "scum." Mr. Bowman explained and demonstrated the use of the "tryer," by which it could be ascertained whether the honey was honestly packed and of uniform quality throughout. He also explained the testing for grain, aroma, colour, etc.

Mr. Baines asked the grader to explain the cause of a slight film of whitey stuff on the surface of a sample of honey.

Mr. Bowman said that it was due to a separation of the granules from one another. This gave rise to a cloudiness that would very often permeate right through a solid block of honey. This trouble very often arose from a tin being just a little damp when it was filled.

Mr. Baines: Would you block this for export?

Mr. Bowman said that if such honey came to him, he would send it back to be reliquified and submitted again.

Cheers were given for the Press, President, and Officers, and the singing of "Auld Lang Syne" concluded a most enjoyable and instructive Conference.

THE EVENING SESSION.

Mr. W. E. Barker, Peel Forest, read an amusing and instructive paper giving his early experience, of which the following is a condensed report:—

Commencing in the year 1900, I laid the foundation of my present apiary with fifteen colonies of bees in frame hives. My first year produced 1,116 lbs., with an expenditure of £27 10s., and my receipts amounted to £21 10s. From that time onwards my profits have steadily increased, until I now have 220 colonies, with plenty of appliances.

The selling of one's produce needs careful thought. I once dropped £35 in this fair city of Wellington by trusting a man, for, after realising on the honey, he decamped to Sydney. My only hope is that he drank the proceeds and died of a cirrhopod liver. After that experience I always liked to have a personal interview with my customers, and found the best way was each year to take a packet or two of honey in a hand-bag, take a few days' holiday to some fresh town, and do a personal canvass of the grocers. I thus made many agreeable friendships, booked plenty of orders, and met with few rebuffs. I was always careful, however, to admire their shop first before I introduced mine. Then next year all I had to do was to circularise the grocers on a half-penny post-card, soliciting orders for the new season. If you put good stuff on the market you should seldom lose an order when once obtained.

Till the year 1906 I had black bees, Italianising them in 1907 with 12 nuclei, and, I am sorry to say, thereby introducing foul-brood and the wax-moth. The latter, however, soon disappeared, as I think our climate is too severe for it. The former I found more difficult to get rid of. Undoubtedly the modified McEvoy treatment of the present day is the best way of treating it, but at that time I found the disease could be kept in check, and in many cases cured, by introducing at night-time into the top storey of a slightly infected colony very quietly a strong natural swarm of bees.

Notwithstanding the foul-brood, I have never really regretted introducing Italians. There is no doubt that, though inveterate robbers, they are far better hustlers, up earlier and at work later, and have, it seems to me, a more robust constitution, able to resist and combat foul-brood, though undoubtedly they can at the same time act as "carriers" of the disease.

What surprised me most in the bee industry was the small capital (given a good district) needed to work it up to a very decent income, and I thought what a help it should prove to any working man who was trying to get on his own, as long as he did not try to go too fast. I have never struck an off-season. This I attribute to the assistance of the native flora,

lancewood, fuchsia, golden mapun, oilwood or pittosporum, kowhai, &c., keeping the bees going when the clover is not. So marked is this that I have never seen up here a bee alight on a manuka blossom, which, I hear, is worked regularly in other districts.

But, notwithstanding a certain close intimacy with the bees, it has been both a profitable and pleasing industry, and nothing gives me more pleasure than handling good fat combs of honey, uncapping and putting them in the extractor, switching on the power—gee-whizz! How nice it is to see the honey fly out. But then, if one gets too busy as one works thinking out the ruling problems connected with the industry, or wondering if we will get six or seven tons of honey, we forget about that confounded honey tap, there is a horrid mess to clean up. Nevertheless, my advice to anyone who wants to enjoy life and materially increase their income is to keep bees—and to keep accounts.

Mr. W. Waters also exhibited his Patent Swarm Control Hive, and then read a paper as follows:—

With the shortest day now passed, next month (July) the queens, after their short spell, will be again getting busy, and in August and September brood-rearing will be in full swing, with the bees drawing heavily on their supplies. I have found that the month of October and first two weeks in November is the time that a shortage of food is most likely to occur. A few days rough weather means starvation.

The wisest plan when you see rough weather approaching is to feed beforehand. The next thing to consider is the best means of supplying food to your colonies. In all instructions I have read on feeding, there is always one solemn note of warning given, and that is: "Upon no account leave any saccharine matter lying about in your apiary, as it will induce robbing." I will say here at once that no more fallacious statement was ever written.

I have been practising feeding in the open for the past eight years, and during that time have not had any trouble with robbing. The best time to feed your colonies is during the warmest part of the day, in the morning between 10 and 11. Procure some shallow dishes (tin milk dishes answer the purpose very well), and place them out in your apiary. Next, get some dead titree brush that has lost its leaf, and place it in the dishes. Come along with your syrup and divide it among your dishes, and in a few moments your whole apiary will appear to be on the wing and tumbling over one another and struggling in their eagerness to get at the food, which will vanish. In a remarkably short space of time your apiary will settle down as peacefully as you could wish. It is just as well to take a look through your apiary a little later, and if you notice a colony, particularly a weak one, being annoyed at the entrance by other bees, pull some grass and throw it along the entrance, and they will be safe.

I suppose in some parts of the Dominion where it is extremely cold, it may be absolutely necessary to feed inside the hive and directly over the cluster, but I have had no experience of such climatic conditions.

PHOTOGRAPH TAKEN AT BEEKEEPERS' CONFERENCE IN WELLINGTON, JUNE, 1914.



MEMBERS OF THE EXECUTIVE OF THE NATIONAL BEEKEEPERS' ASSOCIATION.

Mr. Jas. Allan (1), Mr. J. S. Cottrell (2), Mr. S. Hutchinson (3), Mr. A. Ireland (4), Mr. H. W. Olling (5), Mr. C. A. Jacobson (6), Mr. R. W. Brickell (7).

Correspondence.

Department of Agriculture, Industries & Commerce,
Orchards, Gardens & Apiaries Division,
Wellington, 15th September, 1914.

Secretary National Beekeepers' Association of N.Z.,
Dunedin.

Dear Sir,—Queen-rearing Apiary, Cook Islands. I have just received the decision of the Minister that, owing to the necessity of the general curtailment of all expenditure during the international war crisis, it has been decided to let the question of the establishment of an apiary for the rearing of queen bees in the Cook Islands stand over for the present.

Yours truly,

T. W. KIRK,
Director of Orchards, &c.

James Allen, Esq.,

President N.Z. Beekeepers' Association, Wyndham.

Sir,—With reference to the representations made by the Beekeepers' Conference in June last to the effect that an additional apiary instructor should be appointed to enable the present instructors to better cope with the whole of their duties, I have the honour to inform you that the matter has been carefully considered, but you will recognise that additional expenditure of this kind cannot be undertaken by the Government in war time, and that the question will therefore have to stand over for the present.

The question of appointing a further instructor will, however, be further gone into after the war.

I have the honour to be, Sir,

Your obedient servant,

F. S. POPE,
Secretary.

(TO THE EDITOR.)

Sir,—In reply to Mr. F. W. Lunt, the way I would treat the combs is as follows:—First, put two empty supers on the floor, and leave a space large enough to put in the hand to regulate a lamp which is placed inside the lower super. Over the top of the lamp place a piece of iron or tin to spread the heat. Tier up as many supers on the top as convenient, with eight combs in each, spaced evenly. Then put a sack and roof on the top. The lamp should be regulated to produce a heat from 95 to 100 degrees. Allow the frames to remain in this what may be termed a hot room sufficient time to warm the honey right through. When ready, the combs should be allowed to cool down a little before extracting, and in the meantime a fresh lot can be put on top of the lamp, and so on through the whole job. When it is necessary to treat large numbers of combs, it is advisable to build a small room, having racks spaced on which the frames can hang.—I am, etc.,

Little River.

C. A. JACOBSEN.

(TO THE EDITOR.)

Sir,—It appears to me that we have now reached a crisis in the history of the beekeeping industry. Indications of this must be apparent to any observant beekeeper. We are every one fully alive to the wisdom of striving to establish an export trade on a sound basis, but I fear that we have failed to appreciate the fact that the local market is still our best means of finding a sale for our product, and that its immense value is greatly under-estimated. I believe that the New Zealand market is capable of great development, but it requires more attention than we have yet given to it. In considering the best means of developing to the utmost advantage the market that lies at our hands, I submit the following suggestions:—

First: All honey must be packed in the best possible condition, and in an attractive form. To secure this we should, as beekeepers, discourage the practice of selling in bulk to grocers and other unskilled packers. Honey requires very careful handling, especially when it comes to liquifying candied honey, and it seldom gets it from those outside the producers. Damaged honey offered for sale is likely to prejudice the public against our product.

Second.—By an extensive advertising campaign, in which in a general way the value of honey as an article of daily food will be prominently brought forward. In this connection I think we should endeavour to obtain the assistance of the Department in scattering broadcast its reprint of Dr. C. C. Miller's pamphlet "The Food Value of Honey." Then I would advocate selling under registered brands, such as "Excelsior," "Eureka," and so on. District names, such as "Canterbury" Brand or "Waikato" Brand, are not advisable, inasmuch as these terms would not be registered by the Trade Marks Office.

If the wisdom of the foregoing is admitted, and we think few will question it, the folly of the beekeeper in selling to the grocer in bulk to be bottled and sold under his private registered brand must be abundantly evident, and yet we hear of beekeepers actually packing their honey in tins and bottles supplied by grocers and others, bearing the grocer's label and brand. Now that the operations of the New Zealand Co-operative Honey Producers' Association is likely to become widespread, I hope that every beekeeper, even those who are isolated, will get into touch with its management without delay with the object of abandoning the present hurtful practice of playing into the hands of grocers and dealers.

The majority of beekeepers have not in the past had any settled policy. While some looked ahead and sought gradually to build up a connection in retail packages, the majority have sold their product anyhow, quite careless of the future and the ultimate injury which such action would inevitably bring upon the whole industry. Those who have no established connection are now faced with this question, "Which shall I encourage, the independent grocer and bottler who is working entirely in his own interest, or our own Co-operative movement, which has for its aim the betterment and prosperity of the beekeeper?" What shall our answer be? I trust that enlightened self-interest will lead to a universal support by every

beekeeper in the Dominion of the Co-operative movement. Then we will be able to have our honey placed on the market in a form acceptable to the public, and under business-like methods, which will largely increase our financial returns.—I am, &c.,

Matapu.

H. W. GILLING.

(TO THE EDITOR.)

Sir,—I enclose membership fee for the N.B.A. of New Zealand. I have never paid so gladly 15/- in my life before as I am paying this, as I feel sure it will put more than that amount in pounds in my pocket. Two years ago I had about 14 cwt. of honey, and I tried to sell it in Auckland, and the best price I could get was 2d. per lb. I sold it to a local storekeeper for 2¼d. He got between 3½d. and 4d. for it. I do not think the honey was improved one iota by the storekeeper's handling, for he sold it in the exact condition he received it from me. I have not heard tell of a bee inspector being in this district since Mr. Robt. Gibb was here some years ago. We are not troubled with dense honey in this district. I will try and get any beekeepers to join the Association, as it has, I believe, lifted hundreds of beekeepers out of the slough of despond, and is making beekeeping both profitable and pleasurable. Wishing you a prosperous season,—I am, &c.,

JOHN CARROLL.

Peria, Mangonui, N. Auckland.

(TO THE EDITOR.)

Sir,—I have a few colonies of bees. The strongest one of all is slightly affected with foul-brood, so forward that they are rearing drones, and I have several colonies which are queenless, and would like to rear a few queens. If impregnated with drones from the colony with foul-brood, would there be any likelihood of these queens developing foul-brood?—I am, &c.,

A SUBSCRIBER.

[We do not think so. Foul-brood is a disease which affects the larvæ only, and it is not transmitted as an hereditary disease.—Ed.]

Major Norton, managing director of the Bristol and Dominions Producers' Association, Ltd., is on a visit to New Zealand of four or five weeks' duration for the purpose of getting into direct touch with the producers of the Dominion, and wishes to meet the beekeepers of each district for the purpose of discussing the marketing of New Zealand honey in Great Britain. In this direction Major Norton has had a large and lengthy acquaintance with the methods and possibilities of the English market, also his experiences in this direction with Australian honey are unique, and as a result of his operations in the English market he is in a position, and is prepared and willing, to guarantee to take the whole of the honey output of New Zealand at a price which he is satisfied will appeal to those beekeepers who purpose exporting their honey. The secretaries of the District Associations have been asked to arrange meetings to meet Major Norton as opportunity offers.

The Bulletin Board.

MARKET REPORTS FROM FAR AND NEAR.

Henry A. Lane and Co., London agents of the Farmers' Co-operative Organisation, through whom the National members exported their honey this season, advise:—"Honey auctions were held in London on June 25th, when 319 packages of Jamaica honey were offered, and all sold at prices ranging from 19/- to 31/6 per cwt. for white colour, less 2½ per cent. discount ex wharf London. This Jamaica honey is filling the requirements of the grocery trade here, and there is a good sale, all the white and good coloured quality being picked up immediately on arrival. In New Zealand honey 176 cases were offered, and 85 white coloured sold at 44/- to 45/- per cwt., less 2½ per cent. discount ex wharf London. This quality is used for high-class trade. There are a limited number of buyers, who are very keen on white colour. Off white colours are more difficult to sell at a lower price, and we sold the consignment per 'Rangatira' at prices ranging from 42/- to 51/-."

Messrs. Henry A. Lane & Co. quote the following honey market, 23rd July, 1914:—N.Z. special white, 45/- per cwt.; N.Z. prime white, 42/- per cwt.

In the British Bee Journal of recent date several advertisements appeared quoting honey at 61/- to 63/- per cwt. If English honey can command such prices, there is surely something wrong with our methods of distribution when New Zealand beekeepers can only get the prices we do. An enquiry has been sent for samples, etc., so that we may see what standard is set us by the British beekeepers.

Department of Public Health.

Regulations under the Sale of Foods and Drugs Act.

Circular Memorandum to Vendors of Honey.

I have to draw the attention of vendors of honey to the fact that the Regulations under the Sale of Food and Drugs Act require that all packages of honey for retail sale must bear a label stating the net weight of such package, and the name and address of the manufacturer or packer of the goods or of the seller thereof.

Will you therefore please see that all such packages of honey sold by you comply with these requirements. In the case of honey already packed or delivered to retailers, it will be considered a sufficient compliance with the Regulations if the necessary particulars be affixed by means of printed 'slips.'

Complete copies of the Food and Drugs Act and of the full Regulations thereunder may be obtained by applying direct to the Government Printer, Wellington. Food and Drugs Act, 9d.; Regulations, 9d.; or, with index and specimens of the required sizes of printing type, 1s.

K. CAMERON,
Supervising Inspector.

HOPKINS TESTIMONIAL.

It was suggested at the late Conference that as Mr. Isaac Hopkins is leaving New Zealand for good early next year, it is fitting that the beekeepers of the Dominion combine and give him a small token of their appreciation of the good work he has done for the industry during his long connection with it.

It was thought that by limiting the subscription to 1/- every beekeeper in the Dominion would subscribe. The testimonial will probably take the form of an illuminated address and an inkstand made in the form of a model beehive from New Zealand greenstone, mounted in gold.

If you are in sympathy with the project, your subscription may be sent to the secretaries of the various Associations, or to the undersigned.

R. W. BRICKELL,

P.O. Box 572, Dunedin.

PUBLICATIONS RECEIVED.

The following publications have been received, and are at the disposal of readers:—

Report and Constitution of the Illinois State Beekeepers' Association: Producing, Preparing, Exhibiting and Judging Bee Produce. A very handy and useful book by Herod.

"Producing Vinegar from Honey and Mead, and how to Make It." By the Rev. G. W. Bancks.

SUBSCRIPTIONS.

The following beekeepers have forwarded the sum of 3/6 as their subscription to the Journal for the year ending June, 1915:—

Jas. Allan (21/-), L. Anderson, John Allan, J. A. Bedford, W. E. Barker, Robt. Black, F. C. Baines, C. Beaven, J. Barraclough, W. H. Brown, J. Clark, D. Collie, C. J. Clayton, J. C. Cooper, M. Connell, W. D. Esther, C. Fogden, E. J. Garrett, A. Gardner, S. Gardiner, H. F. Housler, E. N. Honore, S. Herbert, R. E. Harris, E. J. Kendrick, C. Holdaway, Mrs. King, Mrs. W. Karl, A. L. Luke, McKnight & Shaw, J. McGettigan, H. McCarrison, Geo. McDonald, S. Nicholls, Wm. Opsey, E. A. Pallant, Miss W. Poulton, H. R. Penny, J. Rombach, R. Stewart (7/-), Geo. Stevenson, N. Smedley, E. Smith, Sim, T. Hopkin, G. T. Watkins, W. Walker, A. W. Westney, J. Walworth.

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,
Office of this Paper.

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,
Wainui, Banks Peninsula.

ROBERT STEWART'S PRICE LIST.

PURE ITALIAN QUEENS, GOLDEN & THREE-BANDED.

	1	2	3	4	5
Untested	5/-	9/6	14/-	18/-	22/-
Select Untested—1/- extra per Queen.					
Tested	10/-	18/-	25/-	33/-	40/-
Select Tested	12/6	22/6			
Breeders	20/-				

Queens supplied at above prices from a new strain procured from the A. I. Root Company, and tested during last season, at customer's option.

TERMS: Nett cash with order. Cheques to have exchange added.

All Queens guaranteed free from Foul Brood, Bee Paralysis, and all other diseases. Bred from pure stock, which have been selected for hardiness, disease resisting, good working, and non-swarmling qualities.

P.O. Order Office, Tapanui. Address: R. STEWART, Crookston, Otago.

ROBERT GIBB'S PRICE LIST.

PURE ITALIAN QUEENS, GOLDEN & THREE-BANDED.

	1	2	3	4	5
Untested	5/-	9/6	14/-	18/-	22/-
Select Untested—1/- extra per Queen.					
Tested	10/-	18/-	25/-	33/-	40/-
Select Tested	12/6	22/6			
Breeders	20/-				

Four-framed Nucleus, 15/- without queen. Clients when ordering nuclei must add the price of queen they want with the bees. Nuclei ready 1st December.

Queens in cages post free; Nuclei f.o.r. Edendale.

Queens supplied at above prices from a new strain imported direct from Italy. Terms: Nett cash with order. Cheques to have exchange added.

All Queens, Bees & Honey guaranteed free from Foul Brood, Paralysis or other diseases.

Address: **ROBERT GIBB**, Menzies Ferry.
P.O. Orders, Wyndham.

September 19th, 1914.]



ITALIAN QUEENS

From Root's Famous Long Tongued
Red Clover Strain.

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

SAFE ARRIVAL GUARANTEED.



PRICES.
Cash
with order.

Untested	10/-	15/-
Tested	20/-	35/-

M. SHEPHERD,

10 WILMER STREET

CHRISTCHURCH.

W. A. DAWSON, FORTROSE.

PRICE LIST OF QUEENS.

	1	2	3	5
Untested	5s.	9s.	13s.	20s.
Tested	10s.	18s.	25s.	42s.
Select Tested	14s.	26s.		

COLONIES OF BEES (without Queens).

2 Frame (Nucleus Colony)	...	...	Each—10s.
3 " " "	...	...	12 6.
4 " " "	...	...	15s.
Full Colony on 10 Frames	...	...	£1 12s.

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/-.

Mnfd. by Wm. A. Dawson, Fortrose. Selling Agents, Alliance Box Co., Ltd., Dunedin.

N.B.—Fill twice a week and keep your Colonies in good order.

The Feeder can be attached to any hive.

J. MYERS & Co.,

Importers & Indentors of all kinds of

CHINA, GLASS, EARTHENWARE, ETC.,

Indents taken for "Farrington"
and other Lines of GLASS
HONEY JARS.

Hunter St., WELLINGTON.

When sending Orders, please give reference.
Indents take about six months for delivery.

Indications so far point to the coming season as likely to constitute a Record in the expansion of the Bee-keeping Industry!—Therefore send forward your orders at once

FOR

“ALLIANCE” BEE
DOVE-TAILED HIVES

The Hive that is the Standard throughout the Dominion. It has a **Waterproof Sloping Roof**, and is in every way the Ideal Hive. Well and faithfully made. Extremely moderate in cost, and gives completely satisfactory service.

The Alliance Co.

STOCK EVERYTHING REQUIRED IN BEE-KEEPING.

Send for Copy of Catalogue.

Alliance Box Co.,
LIMITED,

Headquarters for Apiarian Supplies,

Castle Street - Dunedin.