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FOR

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The New Zealand Beekeepers' Journal

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

No. 9 Vol. 6 7/6 Per Annum.

National Beekeepers' Association of New Zealand.

The object of the Association is the improvement of the Beekeeping Industry and furthering the interests and 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 fees as follows:—1 to 15 Hives, 5/-; 16 to 50 Hives, 10/-; 51 to 100 Hives, 15/-; 100 to 200 Hives, 20/-; every additional 100, 5/- extra.

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All matter for publication must be in the Editor's hands NOT LATER than the 20th of the month previous to publication. Address

FRED C. BAINES, Kati Kati, Bay of Plenty.

CONTENTS.

EDITORIAL.

We have repeatedly written on the co-operative system of marketing and the benefits to be obtained by such a system as we have in N.Z.

In the July issue of "The Australasian Beekeeper" under the heading of "Honey Market Report" the following appears:—

"The most disastrous thing that has occurred for beekeepers during many years, is the practice adopted this season by many apiarists of endeavouring to find a market for their own produce irrespective of marketing conditions and values.

During Easter week many beekeepers were in Sydney for the Show and would appear to have seized the opportunity to canvass very thoroughly all wholesale houses and shops.

Some found a ready market and quickly disposed of all their crop. BUT at what a price!

Reports which are authentic indicate that sacrifices at from 15/- to £1 per tin were, in many cases, made.

The original idea was, undoubtedly, to save commission, but the final result was a massacre of the market, which forced values down to a lower level than ruled before the late rise.

Agents had practically made a 6d. market and had held this for some time until the wholesalers by means of country canvassers, who bought entire crops at ridiculously low figures, forced values to drop considerably in order that any sales at all might be effected. . . . . .

At present, practically every house is quoting a different figure—some are loathe to drop prices and are holding out for 5½d., others are selling best quality at 4½d., feeling that it is futile to endeavour to maintain a market that is being persistently slaughtered by direct-dealing apiarists.

Some 6,000 tins have arrived in Sydney during the last three or four weeks, all to the order of speculators who will sell under the market and still reap a handsome profit."

Not since the formation of the H.P.A. in 1913 has anything like the above appeared in any periodical in N.Z., and it speaks volumes for the success that has attended the efforts of those responsible for the continued activity of the Assn., both suppliers and management.

There can be no question that without the H.P.A. the conditions in N.Z. would be exactly the same as in Australia—no man knowing where he was going to dispose of his crop, or what price he was to ask, or what he would eventually get; because when once the merchants and speculators get their hold on a line of produce, it is usually the "strangle-hold" and the producer is strangled.

There is another aspect to the question. By the courtesy of the Dept. of Agriculture we are able to give a reproduction of the photo of the display of honey made at the office of the High Commissioner in London. This display was made in what we have no hesitation in saying is one of the busiest thoroughfares in the world—in the Strand, London, where millions of people pass through every day. This display of a standard article, under a standard package and brand, would be impossible unless we were organised at this end. And what is the result? Honey from other countries is quoted at from about 27/6 to 47/6 per cwt., but N.Z. runs to between 75/- and 80/- per cwt.

Years ago when we all did our little bit of exporting, we realised prices ranging from about 35/- to 45/- per cwt., yet the honey exported at that time was equal to that now being sent away. Why then, the difference in price? Simply because by organisation and standardisation of a product, one can command a better price, as by these means nothing inferior can get on the market, the supply is regulated to the demand, and by selling a first grade article all the time, the demand can be created.

The writer when in Taranaki submitted samples of honey to London merchants for offers. One firm wrote stating that there wasn't a very great demand for the white honey as per sample, unless there was a shortage in the crop of Californian white. The N.Z. white honey was then purchased and used by the principal packing houses to blend with the darker honey from other countries, as these firms had practically standardised the colour for retailing, which was described as "light orange."

Now, how far could we ever hope to get better prices for our honey which was being used simply to raise the grade of inferior honey for the English market.

Our honey completely lost its identity; the public had no opportunity of tasting the splendid article N.Z. was able to produce, and consequently we could not possibly get any "forrader."

All this has been altered by the existence of the H.P.A., to the benefit of the N.Z. producer, and we are very glad to note that the suspicion and distrust of the Assn., coupled largely with the selfishness of the producer, is gradually disappearing, and the co-operative movement is being supported in a manner that indicates unqualified success.

* * * *

But there are those who say, "Yes. the co-operative idea of selling cannot be improved upon, but the fault of most co-operative companies is that the overhead charges are always high and eat up so much money that the actual benefit obtained by the improved price is not gained by the producer." We are going to admit that this is unfortunately true in a great measure, and our own Association has in the past been guilty of the same thing, but the recent change of management has eliminated a great many avenues where cash was going, and we are firmly convinced that the actual necessary charges for handling and marketing our honey will be shown in the next balance sheet to be down to the minimum.

But, unfortunately, the shareholders themselves do not take sufficient care to help keep these overhead charges down, and to prove this we have obtained a few particulars from the H.P.A. that are astonishing.

Last year 1,607 cases were rejected from 101 shareholders; 227 cases were rejected on account of honey fermented; two classes of honey in one tin; honey not being uniform in colour in the one package; and bad flavour and poor quality. There were 187 cases rejected on account of low specific gravity; 916 cases rejected, being in benzine tins; tins too full; branding on both ends of the cases, and bad tins. There were 207 cases rejected on account of the lids being more than 3 inches in diameter, others being soldered down. There were 9 cases rejected on account of

being damaged in transit; and 60 cases on account of the honey either not granulating or being of soft granulation.

These figures do not include honey packed in benzine tins by promise of the late General Manager prior to his leaving the Association.

This is an enlightening statement of how the overhead charges are kept so high, and in the majority of instances through sheer neglect of conforming to the instructions issued by the Assn. We venture to assert that many of the offenders wouldn't dare to send their honey to a firm of merchants who were purchasing outright, in the same careless manner in which they send to the Assn., because they would know very well that there would be a big deduction off their cheque. But these careless beggars seem to think that because it is for their own Assn., any old way and any old container will do. And the unfortunate part of the business is that the careful men have to share the expenses caused by the careless.

No wonder it was necessary for the H.P.A. to send out that circular re tins on June 30th.

The H.P.A. must have a uniform package right through the Dominion, which will allow them to decide which honey will be brought to the depot, and which shall be exported. Heretofore, they have been forced to take large quantities into the depot simply because shareholders would not carry out instructions.

We understand that the Board of Directors has decided that during next season, in any case where honey is rejected at the grade store, the shareholder will be charged with the full cost of getting the honey to the Auckland depot for the local market. And quite right too!

* * * *

Isn't it extraordinary that so much expense should be incurred through carelessness in not conforming to the simple instructions issued? They are so simple that it seems to us a man has to go out of his way to not conform. New 60lb. tins are required, these to be rubbed over with a rag saturated in linseed oil to keep them from rusting. Two tins in a case with planed ends, and the case branded one end only, nailed sufficiently to carry them to the grading store without strapping. There could not be any package more simple.

The writer compares this with what he had to do not many years ago, when he sold over 3 tons of honey in 1lb. glass jars, each of which had to be handled seven times before the case was ready to be railed to its destination.

Now about the honey. This should first be tested for its specific gravity, which is quite a simple matter. Full instructions are given in the Govt. Bulletin on Bee Culture, which you can get free of charge by writing to the Dept. of Agriculture. If the S.G. is below 1.420, you know at once that it cannot pass for export, so it is useless sending it to the grade store. If all right as regards S.G., get it into the tins and cases and hold at the apiary until granulated, else it will only incur storage charges to your loss.

If it will not granulate, or only to a soft texture, then send a sample to the head office, asking for instructions, which will probably be to send it to the bottling depot for the local market.

There could not be easier instructions to follow, and we do hope that these few remarks will prompt all suppliers to the H.P.A. to realise their responsibilities in this matter, and thus help to increase the ultimate return they and others will obtain for their produce.

* * * *

We did not have a good response to our offer of a guinea for the best article on "Spring Management," which we have awarded to Mr. J. Murdoch.

Mr. Murdoch stated that if he won the prize he did not wish for the guinea, but would be pleased to donate this with another guinea added for the best article sent to the Journal between this and next Conference.

This should ensure a few good articles coming forward, and we thank Mr. Murdoch for his generous help.

Publications Received.

We have received the new price list of supplies and appliances from the N.Z. Co-op. H.P.A., and must congratulate the Assn. on the general get-up of the publication.

The list of agents for their goods is a wise move, as many beekeepers will save money by purchasing at the nearest agent instead of sending to headquarters.

The "few words" on the aims and objects of the Assn. are good and to the point, and cannot fail to impress those who read the advantages of co-operation in both buying and selling.

The book consists of 24 pages, well illustrated, and a full description of all appliances listed.

We advise all our readers to secure a copy if one has not already been received by them.

Market Reports.

Since our last report our market has been dull with very little enquiry. We have, therefore, no encouraging report to send you except that the values remain nominally about the same as we quoted last month, from 45/- to 47/6 per cwt. for Chilian fair quality. We have received 1,077 barrels during the last month.

Beeswax.—We have a similar tale to tell about this. The price still remains about £8 per cwt.

We are sorry we cannot give a more favourable report, but we are afraid there will not be much life in the markets until towards the end of the summer.

TAYLOR & CO.

Liverpool, 5th July, 1922.

The Director of the Horticulture Division has received from the apiary instructors the following reports concerning the honey crop prospects:—

Auckland.—The month of July has been good wintering weather for the bees, being mostly fine days with cold nights. Although there has not been much activity in the apiaries (except in the north), brood-rearing has started freely, indicating perhaps an early season. Prices remain as last month. Inquiries are now coming in for colonies of bees from the Tauranga State Apiary, and several small lots have been sold.—G. V. Westbrooke.

Wellington.—The weather during July has been exceptionally fine, and the bees in this district appear to be wintering well. Prices both for honey and beeswax remain unchanged.—H. W. Gilling.

Christchurch and Dunedin.—There is little fresh to report. Bees are wintering well in most districts. Owing to the mildness of the weather prevailing, brood-rearing has been proceeding during the whole of the winter period. More rain is required for the clover pastures. A good fall of snow would prove beneficial. Prices are firm. Bulk honey in short supply. Pat honey very little offering. Beeswax little offering.—E. A. Earp.

Beekeeping for Beginners

[As these instructions conform to the seasons in the Auckland Districts, an allowance must be made for the difference in latitude North and South. Average bee-seasons in the extreme North are four weeks earlier, and in Southland three weeks later.—Ed.]

The winter for the most part has been mild and dry, in fact far too dry to ensure a good spring growth in the pastures, which means so much to the beekeeper as well as to the farmer.

In my locality the bees have been working the whole winter, and my preliminary examination of the apiary revealed brood-raising in every hive up to six frames in the strongest, with bees covering the twelve frames. My district being one in which the flow comes on during November and generally ceases about Christmas, having the bees strong early is alright, but in districts where the flow is about six weeks later, this would not be advisable, as the bees would be at full strength too early and if a bad spell of weather came, there would be a lot of feeding to do.

My work so far has been the sorting of combs, which I find is a very useful and necessary job. These are sorted into brood combs, new combs suitable to be used as brood combs, extracting combs, partially drawn-out foundation, and plain foundation. I find it is a great convenience in the spring to go to a tier of supers and know I shall get the very comb I'm after without any bother. All brood combs having an excess of drone comb are put aside, and are then all gone through, the drone comb cut out and worker comb taken from damaged and misshapen combs fitted into the spaces. It is surprising what a number of first class brood combs can be made in this way, as the bees make the join almost imperceptible.

There is practically no work to be done in the apiary yet, if my last month's instructions were carried out.

Should you want to alter the position of your hives, you will want to do it at once before there are too many flying bees to get lost through the change. If you want to move them only a few feet, this can be done by degrees, say a foot or so every evening. But if it is some distance, close the entrances of the hives one evening with a piece of wire screen and shift them to the new location, but leave the bees confined for 24 hours, and they will mark their new location on their first flight.

F. C. B.

Canterbury Tales.

By E. G. WARD.

In referring to Canterbury weather conditions last month I quoted figures showing that the rainfall had been very scanty to date and I am, unfortunately, unable to report any improvement yet. In the Christchurch district only about half an inch has fallen in the month. The Oxford district has fared better, as about three inches have been registered since last report. The last fortnight has been mild all over the province and signs of spring are showing. There is a slight tinge of green on some of the weeping willows and plums will soon be bursting their buds. Frosts having been so severe and frequent, the season is not so early as might be expected, but farmers are anxious for rain soon, as feed is scarce. From the beekeepers viewpoint, it will be unfortunate if bad weather comes like it did last year, while the willows were blooming, but if it does I suppose we must grin and bear it.

I would like to remind anyone who got Hubam seed from me that it should be sown early in September. It will come into bloom in about twelve weeks from time of sowing, and probably bloom about twelve weeks. Look up the Journal and note the cultural hints given. I have threshed last year's crop a second time

and got some more seed out of it, but even now there is some left, so I shall go over it again, as there is still enough left to make it worth while. Quite a number of people have written for seed, but unless I can manage to get some when I try again, they will be disappointed, as I have completely sold out. I wrote to America about three months ago and have now received enough inoculating material for the seed which will be sown near my apiary. As previously stated, about four acres will be sown, so that I shall be in a position to satisfy a fairly large inquiry next year. I have also received plans and specifications of the scarifying machine invented by Professor Hughes, and shall make one in time to deal with next season's crop.

I make no apology for asking honey producers to carefully "read, mark, learn and inwardly digest" the accompanying extract:—

DAIRY COMPANY LAW.

A meeting of dairy farmers is to be held in Levin next week to consider suggestions for incorporation in a proposed Dairy Companies Act, 1922 (says the Wellington Post). The following motion will be put:—

"That, as dairymen, we view with concern the present legal and doubtful status of co-operative dairy companies, and the unsatisfactory results of endeavouring to fit in with existing law. We therefore determine to ask with all urgency and our united voice that a law be placed on the Statute Book, to be called 'Co-operative Dairy Companies Act, 1922.'"

The new legislation to be asked for will be in the direction of compulsory supply of saleable surplus of dairy produce, particularly milk or cream, by members to the factories and companies in which they are shareholders, the liability in respect to the nominal value of shares held to be extended for five years after ceasing to be a member or refusal to discharge obligation. Provision is to be made for the holding of "security" shares additional and in proportion to shares already held in co-operative companies. No place of profit is to be held by directors of co-operative dairy companies in such companies apart from such profits as shall accrue by virtue of membership in or supply of products to such company. Alterations in the memorandum and articles of association of co-operative dairy companies will also be considered, especially with reference to allotment of unallotted shares to existing shareholders."

—Times.—22/7/22.

I should also like to quote in full the presidential address given by Mr. W. J. Polson at the Dominion Conference of the N.Z. Farmers' Union which commenced in Wellington on July 25th, but it is too long. Mr. Polson sketched the history of what had been done during the last twelve months in the matter of a compulsory meat pool. He laid great stress on the necessity for compulsion.

"With it we can stride on to success, without it we are at the mercy of the middlemen. The American farmer has learned this lesson so thoroughly that he has forced from Congress the right to apply compulsion to every branch of his industry, to enable him to market his produce through a compulsory pool. The American farmer has discovered that no voluntary pool is worth while, that the speculator can smash a voluntary pool in a single season by paying a little more for the best and letting the inferior article go into the pool, so that comparative prices are bound to be against the pool and in favour of the speculator. Thus the unreasoning farmer is prejudiced against the pool immediately. With the very best wishes towards the Meat Control Board, with the highest esteem for its individual members as fellow producers, and with the greatest sympathy for them in the extent of their work, I am bound to say that nothing short of compulsion applied at the earliest possible moment will satisfy the producers of this country, who, while they will agree that the work the Board has already done is extremely valuable, require to be reassured that their wishes are being given effect to, and that they are not being betrayed. It will be our own fault if our wishes are thwarted. We will only have ourselves to blame. If our organisation is powerful enough, we can insist that this great opportunity is not trifled with; that no interest intervenes to defeat our aims, and that the mandate of the producer must be obeyed."

He then went on to a discussion of the position in regard to the dairying industry and the tenor of his remarks went to prove that the N.Z. dairymen were waking up to the fact that some scheme of compulsion was absolutely necessary if they were to get the whole benefit of the principle of co-operation. "When the day returns that Siberia takes her former place as the greatest dairying country on the face of the globe, we shall see such competition as will force us to adopt compulsory co-operation as our great fighting weapon if we have not already done so. . . . ."

We all know that there are two sides to every question, but it is evident from the above that we are not the only primary producers who have problems to face. As long as voluntary co-operation exists, we shall be faced with competition in our own ranks. Moral suasion has been tried and found wanting. It seems as if the time has arrived to move in a similar direction to that in which the meat producer and dairyman is being driven.

On July 20th, Mr. J. Rentoul gave an address in the Trades Hall on "Spring Re-queening and Swarm Control." I don't remember if Mr. Rentoul's methods have appeared in the Journal, but his remarks

were of such an interesting and instructive nature that I'm sure a summary of them will be appreciated. Mr. Rentoul explained that his method was designed for handling a large number of colonies. Every effort had to be made to keep level with work where a large number of colonies were worked. His bees, of which he owned about 500 colonies, were divided into eight apiaries, and the chief problem was to control swarming. Before explaining his methods he reviewed the various plans of swarm control, such as the Demaru plan and its variations. He then referred to an article in the June issue of "Gleanings," in which the writer, Mr. Geo. Demuth, editor of that periodical, made the statement that there was always one condition present whenever swarming occurred, and that was congestion of the brood nest. With this he agreed and thought his method was calculated to deal effectively with this invariable condition. He thought his plan was better suited to South Island conditions than the northern plan of re-queening in autumn and building up colonies in spring by feeding.

The plan in brief consists in dividing the colony, re-queening the queenless half, and then re-uniting after the young queen is laying. The operation is carried out by first getting the colony as strong as possible, preferably by outside feeding if there is no early honey flow. By feeding at the rate of about ¼lb. of sugar per colony each day, a stimulus is given which ensures a steady march onward with brood-rearing, and although it might be thought that robbing would be induced, he does not have any trouble from this source, as the feed is cleaned up in short order, and all hands have an innings in the game.

He rears all his queens at the home apiary, where he keeps about 50 colonies, and plans to have his cells ready early in the season so as to unite the divided colonies and have a young queen in the hive before the main flow starts.

For raising cells he uses what he calls a permanent swarm box, and after cells have been started he gives them to strong colonies to finish. When cells are ripe they are given to the queenless half of the divided hive. If the virgin should be lost, he introduces another which he has on hand, either in nursery cages or nuclei.

For introducing either virgin or fertile queens, he finds the Jay Smith cage invaluable, and very rarely has a failure. To ensure safe introduction, the cage, which is made on the push-in-the-comb principle, is placed on a patch of hatching brood and left 3 days after which the queen can be safely released.

When cells are hatched in nursery cages, through adverse weather conditions, he has found it preferable to provision the cage with honey instead of candy. The honey he puts in a small capsule which fits the usual candy hole, and his percentage of dead virgins is very small since adopting this plan. He advised rearing plenty of queens and merciless culling to get the very best.

It will be seen that the plan provides for annual re-queening if the end sought is to be attained, but his experience teaches him that the results warrant the effort. By getting his re-queening done early, he can have an easy mind as regards the swarming problem and devote his attention to securing the honey crop.

Mr. R. W. Brickell attended the same meeting and gave a short talk on the selling end of the business. He spoke optimistically of what was being done by the H.P.A. agents in London, and urged shareholders to be loyal. His remarks were much on the lines of what has been often reported and met with general approval.

On August 3rd, Mr. P. F. McLay gave an address on "Beekeeping for Beginners," which I need not give in detail. He dealt with the subject chiefly on orthodox lines and handled his subject really well.

There are quite a number of interesting matters which have been dealt with in the last issues of "Gleanings" and the "Bee World." I hope to touch on these next month, but before closing these "tales," there is a matter which I think should be dealt with at once. Some time back Mr. Young, the apiary inspector for Canterbury district, resigned from the Department, and so far his place has not been filled. Now we all know that Mr. Young was a particularly energetic officer, but unless the work he started is carried on by a successor, it will be thrown away. I would suggest that the executive of the National bring strong pressure to bear on the powers that be, so that another inspector be appointed immediately. We all know that retrenchment is the slogan just now, but it is simply impossible for the present staff to cover such a large field as the Canterbury, Nelson and Marlborough district. I need not go into all the arguments—they are obvious, and our claim is just

New Blood in the Apiary—Is it Necessary?

By FRED C. BAINES.

When the embargo was recently placed on the importation of queen bees into the Dominion, there was a certain amount of opposition raised by those who contended that by not importing new blood, we were in danger of deteriorating our strain of bees, as we should be constantly in-breeding, which is generally thought to be detrimental to any line of stock. I am not a scientist on this matter, I have read a little on heredity, eugenics, and Mendelism; but for all that I am only an ordi-

nary layman on the subject of breeding. Therefore, I was particularly interested to read the following address which was reported in the Otago Witness of July 18th:—

A DISTINGUISHED VISITOR.

"Mr. C. A. House, editor of the Poultry World, and author of many works upon poultry, recently visited Christchurch and judged some of the fancy classes at the Rangiora Show. Mr. House was brought out to judge in Australia by a number of Australian Societies, and is making a flying trip to New Zealand before returning to London. When in Christchurch Mr. House delivered a lecture upon "in-breeding" to an audience of poultrymen. The remarks had a general application, and were not alone applicable to poultry. The lecturer said that those opposed to in-breeding said it caused the loss of size, stamina, and everything good, and substituted everything bad. The ordinary man was of the opinion that in-breeding was simply the mating of two closely related animals. When the subject was studied it was shown that the in-breeded regarded it as the mating of strains related to each other.

If it was wanted to bring out special characteristics the mating of related birds possessing the characteristics could be decided upon without fear of getting a 'sport.' When a breeder wanted colour he mated the best in colour. If he wanted something else, he mated stud members showing the desired characteristics. When the stud was deficient in some special characteristic, it may be that birds or animals from the stud were deficient in some small particular, and after a while lost when under some judges who were sticklers for this special point, it was necessary to get some animal with the necessary characteristics that it was desired to introduce. The opponent would say that this was out-crossing. It was, but the breeder carefully wrapped up the special characteristic in his stock by in-breeding.

The island of Jersey was one of the greatest arguments in favour of inbreeding. It was well known that the Jersey Parliament had enacted a law that had prohibited the importation of cattle except for slaughter. The Jersey was inbred more than any other cattle, and the butter-producing records of Jersey cattle spoke volumes for their utility. One of the leading merino studs in Australia had been bred from sheep that were originally brought to Australia in 1805, and no alien blood had been introduced.

The breeder does not choose relatives for the nearness of relationship but for quality. No breed of fowl was so largely inbred as the Brahma, except, perhaps, the Cochins. These were the two biggest breeds and though they were being inbred their size was increasing rather than decreasing.

The utility man might say that inbreeding was all right for a fancier, but it was no good when eggs were wanted. The Chief Poultry Expert of New South Wales said that inbreeding was not desirable, but at a lecture given by Mr. House in Australia he was promptly challenged by one of his auditors, and had to admit that he, when in charge of a big plant, consistently inbred. The Chief Poultry Expert in Victoria was strongly in favour of the method, and said it was a great mistake for breeders to buy fresh cockerels every year. One of England's largest breeders of utility fowls, who sold his pullets with a guarantee of £1,000 that they would lay 2oz. eggs within six weeks of their being sold, was a strong advocate of inbreeding. Judson, the leading breeder of Black Orpingtons in Australia, consistently inbred. If grit and stamina were necessary in any bird, it was necessary in a racing pigeon. Belgium was the home of the homing pigeon. Belgium's leading pigeon breeder, a man who has bred birds that had accomplished what no other birds before or since had, made a start with a pair of homers when a child, and from the two birds had bred up the leading loft in the world without ever introducing any other blood to his loft.

When a breeder wants to improve his stock or correct some fault, he should select from his own stud birds that had the required properties. If it was necessary to go outside, the same principle should be followed; but the risk with the newly-introduced stock was that the breeder would get a great deal of what he did not want. Introducing new blood into a strain nearly always led to trouble. Probably the first cross would give what was wanted, but the second generation was often not what was wanted. By taking two units of the breeder's own strain he was doubling up to produce the properties required. It was best to work slowly and surely."

Well, now, if inbreeding is so detrimental as we have been given to understand, why is it that the Jersey cow that has been persistently inbred for years is not a "scrub" instead of being the premier breed of dairy cows in the whole world? The same with the sheep, pigeons, and fowls, as cited by Mr. House, which in every case shows a steady improvement to the ultimate "best in the world."

Now, if with cows, sheep and birds, why not with queen bees? I don't know! For my own part, I have never considered the importation of queen bees was necessary from the time when it was proved that we had a pure strain of Italians with the best characteristics of the breed available in the Dominion, and that we have had for a number of years.

Would some of our friends who are well up in the matters of heredity, etc., send us a line or two pointing out any weaknesses of the argument when applied to queen bees. This article is written more with the idea of gaining information than giving it.

Of course, when one is in a district similar to the one I live in, where there are miles of bush with any number of black bees in the hollow trees, it is a sheer impossibility to keep one's stock pure, and purchasing from an outside source is necessary. But there!—no one would attempt to "breed" Italian queens in a district where there was a preponderance of black drones.

Marketing Honey.

By MAJOR SHALLARD.

It is extremely difficult to understand the reasons which actuate some of the beekeepers of New Zealand in robbing themselves and their fellow-producers by price-cutting. New Zealand is a compact country, in which the sale of honey was well organised on co-operative lines very beneficial to the producers. Now, a minority of the beekeepers are deliberately tearing this system up by the roots: they are deliberately reducing the value of their own products. Why? They must surely imagine that their tactics are profitable to themselves, but are they? Do these people wish to pose as benefactors to the human race? or is it that they actually fail to realise what they are doing—viz., lowering the value of their own and others' crops needlessly? Because there is no legitimate reason for cut-throat prices of honey in New Zealand, and the public are always willing to pay a fair price for a good article, and as a matter of fact they always pay a good price, but it is the middle man who gets the lion's share. He comes between the producer and consumer and takes the cream, while the producer lives in the skim milk. If there are several sellers and only one purchaser, the latter works the former against one another; but if there is only one seller, or, rather, if all producers are selling through one agency, then they get the price asked without any demur. Any trader will buy freely once he is assured he is buying at bed-rock price. But if he is in doubt and thinks prices may fall, he is naturally very shy of filling his requirements. In one large city the Italian fruit shops combined and bought all their supplies through one man: that is to say, one man bought all the fruit for, say, a hundred shops. He got to the fruit market early, and offered about 75 per cent. under price quoted. This, of course, was not accepted. About an hour before closing time he strolled around, and bought at practically his own figure. Fruit being perishable, and the sellers not caring to cast it away or carry it over until next day's sales, it was necessary to dispose of it, even at a loss. A seller has no hope unless buyers compete for his goods, and the only way to compel competition is by having only one seller, or, in other words, selling through your admirable co-operative company. It may be more expensive per pound to sell through this company than selling on your own, but you get the difference back and whole heaps more by doing it.

If you have any doubt about it, just see how the present cut-throat policy has lowered prices in New Zealand since its adoption. You New Zealand people do not know what a good thing you have in this company, or you would not allow a small crowd to jeopardise its existence. If you lived in Australia you would know "wots wot," and you would look with longing eyes on the New Zealand Co-operative Company and long to have one in Australia. We—(a few of us)—are hoping to educate the Australian apiarist up to the value of his product, but it is an uphill game. There are an awful lot of poor business people in the industry. They can produce a crop O.K., but they have no idea of marketing it, and consequently the middleman gets more out of it than the producer.

Stick loyally to your Co-operative Company and you will never regret it.

S. Woodburn, N.S.W.

Spring Management.

By J. MURDOCH.

The successful beekeeper commences his spring management in the autumn. Unless he leaves sufficient stores not only for the winter but when brood-rearing is in full swing in early Spring, he runs the risk of losing his best colonies, especially if each one is headed by a young and vigorous queen.

One can, of course, use artificial means of feeding if provision has not been made in the Autumn, but I contend that if you want the best results from your bees, then give them the best food that nature provides.

In different locations and different climates one wants to use different manipulations. We had a visit from a well-known North Island beekeeper recently, and he was an honest man when he answered my query as to beekeeping here. He said: "If I were going to start beekeeping in Westland, I would have to throw overboard all my preconceived ideas of working and adapt myself to the conditions ruling here." Were I to start in Auckland I would have to adopt a different method of working.

This Winter I spent five weeks between Christchurch and Invercargill. I had the pleasure of a chat with several beekeepers and after exchanging our experiences, especially comparing our average returns per colony, I came to the conclusion that Westland for a honey crop was good enough for me.

I find that two supers above the brood chamber are nearly always sufficient here during the season. Before going to Conference, I tried to take off the top super from each hive, but found so much honey in it that I had to leave it until July. Any hives with empty combs in the first super were stored away and their place taken with full or partly filled combs of honey.

I have still about twenty supers of partly filled combs of honey in the honey-house as a stand-by in the event of a wet Spring. There is nothing like a supply of comb honey for Spring feeding, provided it is clean, when the weather is wet and stormy; and should it turn out to be a fine Spring, there is nothing lost.

During the month of August every colony is again examined, any dry combs being replaced with partly filled combs of honey. During September the stores begin to melt away like magic. In October the hives are bubbling over with bees, and if the weather is at all suitable we can look out for swarms. When the first natural swarm comes off in the apiary, this is the time to start work if one wants artificial increase.

Each hive is carefully examined, and where we find ripe queen cells, one or two of the best, with adhering bees and some brood, is placed in the new hive, and the queen in the old brood chamber is removed to a new stand. The flying bees next day all make back to the old stand, but in two or three weeks the old hive is as lively as ever.

To those who use the zinc queen excluders and are prepared to try an experiment, I would say:—At the four corners cut out a piece of the zinc excluder three-quarters of an inch wide by four inches long, and you will find that the bees when coming in loaded will make for one of the four corners in preference to passing through the perforations in the zinc. When taking off honey, I have noticed the bees always making for one of the four corners rather than passing through the holes in the zinc. Many beekeepers put on the excluders too soon in the season. When we extract for the first time, we remove all the frames in both supers, then scrape all comb and honey off the top of frames in the brood chamber, put on excluder, then fill in in the same order any frames having brood and honey in centre of super, finishing on outside of brood combs with wet combs from the extractor.

In the event of any drone brood being placed above the excluder, when they hatch out they can get through the corners, and so do not remain above, and decay in the hive.

With natural swarms, particularly if they are small or late in the season, and in your judgment one super above the brood chamber will be quite sufficient for that season, then this excluder can be used to advantage.

We never put any combs through the extractor containing brood, and it is only on rare occasions that the queen finds her way up; but when she does we shake her on the alighting board, and she runs in below again.

With this method last season we obtained an average return of 187lbs. per colony.

District Reports.

MARLBOROUGH.

The annual meeting of the above Branch was held at the offices of the E. H. Best Co. Ltd., High street, Blenheim, on Friday evening, the 14th July, at 7 o'clock. The following beekeepers were present:—Messrs. J. A. Moreland (in the chair), H. Best, J. A. Robertson, C. F. Miller, E. Diaper, C. B. Connolly, P. G. Moore, and C. M. Brooks.

Mr. J. A. Robertson moved, and Mr. C. F Miller seconded—"That Messrs. C. B. Connolly, P. G. Moore, and C. M. Brooks be duly elected new members of the Association."—Carried unanimously.

On the motion of the Chairman, the minutes of the previous meeting were confirmed.

The election of officers for the ensuing year resulted:—President, Mr. J. A. Moreland; Vice-President, Mr. H. Best; Secretary-Treasurer pro tem., Mr. C. M. Brooks.

Owing to there being counter-attractions in town on the evening of the meeting, there was a meagre attendance of members, and the meeting was reluctantly brought to a termination with a vote of thanks to the Chairman, who has kindly offered to personally interview some of the old members re the retaining of their membership.

C. M. BROOKS

AUCKLAND PROVINCIAL BRANCH.

A general meeting of our Association was held in Hamilton on 15th inst., about ten members being present, Mr. C. Smedley (President) in the chair.

The minutes of the previous general meeting and annual meeting were read and confirmed. The balance sheet, held over from annual meeting on account of not being complete, was adopted.

The Secretary of the Rotorua Sub-Branch wrote stating they were having trouble holding the interest of the smaller beekeepers.—It was decided that we would try and arrange with Government instructors to hold some demonstrations in their district this Summer.

The National Secretary wrote stating that they were unable at present to pay subsidy asked for on our Field Day expenses.

The Secretary reported on the Branch remits sent to annual Conference in Dunedin.

The following resolution was moved:—"That we again approach the Department urging them to appoint a resident inspector for the Waikato District; also that we strongly protest against the present method of so-called economy in not filling present vacancies and the policy of curtailing the facilities for efficient inspection work."

Resolution moved:—"That it be a recommendation to the National Executive that, when approaching the Government on matters affecting legislation, freights and matters of general interest, the assistance of unions of other primary producers be sought, pending proposed federation of such unions."

Winter Show Exhibit.—This matter had been carried out; a very fine exhibit had been staged, but had not been quite what had been expected. The Committee are to take the matter up, and try and arrange for separate display from each district for 1923 Show.

A vote of thanks was passed to Messrs. Smedley and Pearson for staging exhibit and to the members who had supplied the honey for display.

Field Day.—It was proposed that the manager of the State Farm be approached for permission to hold the 1923 Field Day at the State Apiary at Ruakura, date and programme to be arranged by the Committee.

The season in our district is just opening up. The Winter has been very cold, and more severe frosts have been registered than at any time in the past. The weather is now warmer, and good rains have fallen. The days are bright, and the bees are working gums, tagosaste, wattle and other Spring blooms. Willows are breaking into bud, and will soon be yielding feed.

A. H. DAVIES.

August 18, 1922.

HAWKE'S BAY.

We all have to offer congratulations to the National for running a successful Conference, and to Dunedin for the stage management of it. The Journal report makes splendid reading, and it does credit to the Editor. Some of us know the work such a report entails.

The work in this district consists mostly in holding meetings and trying to interest those who refuse to be interested. Not being in a commercial district, our Association has an uphill fight.

But Spring here always has a promise; it is the Summer that tries the beekeeper.

By the time these notes are printed, the bees will be at the willows. Cherry plums have now their first few early blossoms, and there will follow a sequence of orchard flowers. The bees, however, are at present chiefly interested in the gums and tagosaste.

Brood rearing is well on, and, given reasonably fine weather, the colonies will quickly build up. It is good advice to have a second storey ready for all but the weakest hives.

J. P. BOYLE.

16/8/1922.

Hokitika's Sunshine.

JUNE AND JULY RECORD.

For the two months of June and July the sunshine records at Hokitika are of a most exceptional character.

During June there were 146hrs. 27min. of sunshine, with only two days without any sunshine.

During July the total of sunshine amounted to 193hrs. 32min., with two sunless days.

This gives a grand total for the two midwinter months of 339hrs. 59min., a daily average of 5hrs. 34min. 24sec. throughout the period.

Mr. T. E. Y. Seddon has received the following letter from the Minister of Agriculture (Hon. W. Nosworthy): "With reference to the deputation which waited upon me at Wellington on the 13th July in connection with the beekeeping and honey-producing industry on the West Coast, I now regret having to inform you that the financial position at the present moment is such that it is quite impossible to approve of any immediate increase in apiary inspectors; but, as indicated in my letter of May 20th, the Department recognises that more attention should be devoted to apiary instruction work on the West Coast than is possible under existing circumstances, and you may rest assured that an improvement in this connection will be effected at the earliest possible opportunity. The advantages which would accrue to the district from the establishment of a honey-grading store at Greymouth are also appreciated, and this matter will be gone into early in the coming year, in ample time for next season, and the necessary arrangements will be made possible."—Hokitika Guardian.

* * * *

Electric gates for bee hives, which will register the number of arrivals and departures on the part of bees, have been designed by an American Government official. —(Clipping.)

Speaking of patents, no one has yet patented a porous plaster to be applied to elderly bees to lengthen the period of their productivity. Energy directed along such lines might accomplish more than that expended in bringing out new types of hives—Beekeepers' Review.

New Observations on the Natural History of Bees.

By FRANCIS HUBER.

(Published in 1808.)

(Continued from last issue.)

LETTER III.—(Continued.)

Hitherto no other effect has been observed from the retarded impregnation of animals, but that of rendering them absolutely sterile. The first instance of a female still preserving the faculty of engendering males is presented by the queen bee. But as no fact in nature is unique, it is most probable that the same peculiarity will also be found in other animals. An extremely curious object of research would be to consider insects in this new point of view: I say insects, for I do not conceive that any thing analogous will be found in other species of animals. The experiments now suggested will necessarily begin with insects the most analogous to bees, as wasps, humble bees, mason bees, all kinds of flies, and the like. Some experiments might also be made on butterflies; and perhaps an animal may be found whose retarded fecundation will be attended with the same effects as that of queen bees. Should the animal be larger, dissection will be more easily accomplished, and we may discover what happens to the eggs when retarded fecundation prevents their expansion. At least we may hope that some fortunate circumstance will lead to solution of the problem.*

Let us now return to my experiments. In May, 1789, I took two queens just when they had undergone the last metamorphosis: one was put in a leaf hive well provided with honey and wax, and sufficiently inhabited by workers and males. The other was put into a hive exactly similar, from which all the drones were removed. The entrances of these hives were too confined for the passage of the females and drones, but the common bees enjoyed perfect liberty. The queens were imprisoned thirty days, and being then set at liberty, they departed, and returned impregnated. On visiting the hives in the beginning of July, I found much brood, but wholly consisting of the worms and nymphs of males. There actually was not a single worker's worm or nymph. Both queens laid uninterruptedly until autumn, and constantly the eggs of drones. Their laying ended in the first week of November, as that of my other queens.

I was much interested to learn what would become of them in the subsequent spring—whether they would resume laying, or if new fecundation would be necessary; and if they did lay, of what species the eggs would be. However, the hives being very weak, I dreaded that they might perish during the winter. Fortunately, we were able to preserve them, and from April, 1790, the queens recommenced laying. The precautions we had taken prevented them from receiving any new approaches of the male. Their eggs were still those of drones.

It would have been extremely interesting to have followed the history of these two females still farther; but to my great regret the workers abandoned their hives on the 4th May, and that same day I found both queens dead. No weevils were in the hive which could disturb the bees, and the honey was still very plentiful; but as in the course of the preceding year no workers had been produced, and winter had destroyed many, they were too few in spring to engage in their wonted labours, and from discouragement deserted their habitation to occupy the neighbouring hives.

In my Journal I find a detail of many experiments on the retarded impregnation of queen bees, so many that transcribing the whole would be tedious. I may repeat, however, that there was not the least least variation in the principle: and that whenever the copulation of queens was postponed beyond the twenty-first day, the eggs of males only were produced. Therefore, I shall limit my narrative to those experiments that have taught me some remarkable facts.

A queen being hatched on the 4th October, 1789, we put her into a leaf-hive. Though the season was well advanced, considerable numbers of males were still in the hive; and it here became important to learn whether at this period of the year they could equally effect fecundation; also, in case it succeeded, whether the queen's laying, begun in the middle of autumn, would be interrupted or continued during winter. Thus, we allowed her to leave the hive. She departed, indeed, but made four and twenty fruitless attempts before returning with the evidence of fecundation. Finally, on the 31st October she was more fortunate. She departed, and returned with the most undoubted proof of the success of her amours: She was now twenty-seven days old, consequently fecundation had been retarded. She ought to have begun laying within forty-six hours, but the weather was cold, and she did not lay; which proves, as we may cursorily remark, that refrigeration of the atmosphere is the principal agent that suspends the laying of queens during winter. I was excessively impatient to learn whether, on the return of spring, she would prove fer-

* The experiments suggested in this paragraph recall a singular reflection of M. de Reaumur. Where treating of oviparious flies, he says, it would not be impossible for a hen to produce a living chicken if, after fecundation, the eggs she should first lay could by any means be retained twenty-one days in the oviducts.—Mem. sur. les Insect. tom. 4. mem. 10.

tile without a new copulation. The means of ascertaining the fact was easy, for the entrances of the hives only required contraction so as to prevent her from escaping. She was confined from the end of October until May. In the middle of March we visited the combs, and found a considerable number of eggs, but none being yet hatched, we could not know whether they would produce workers or males. On the 4th April, having again examined the state of the hive, we found a prodigious quantity of nymphs and worms, all of drones; nor had this queen laid a single worker's egg.

Here, as well as in the preceding experiment, retardation had rendered the queens incapable of laying the eggs of workers. But this result is the more remarkable, as the queen did not commence laying until four months and a-half after fecundation. It is not rigorously true, therefore, that the term of forty-six hours elapses between the copulation of the female and her laying; the interval may be much longer if the weather grows cold. Lastly, it follows that although cold will retard the laying of a queen impregnated in autumn, she will begin to lay in spring without requiring new copulation.

It may be added that the fecundity of the queen whose history is given here was astonishing. On the 1st of May we found in her hive, besides six hundred males already in the winged state, two thousand four hundred and thirty-eight cells containing either eggs or nymphs of drones. Thus, she had laid more than three thousand male eggs during March and April, which is above fifty each day. Her death soon afterwards unfortunately interrupted my observations. I intended to calculate the total number of male eggs that she should lay throughout the year, and compare it with those of queens whose fecundation had not been retarded. You know, Sir, that the latter lay about two thousand male eggs in spring; and another laying, but less considerable, commences in August; also that in the interval they produce the eggs of workers almost solely. But it is otherwise with the females whose copulation has been retarded: they produce no workers eggs. For four or five months following they lay the eggs of males without interruption, and in such numbers that, in this short time I suppose one queen gives birth to more drones than a female whose fecundation has not been retarded produces in the course of two years. It gives me much regret that I have not been able to verify this conjecture.

I should also describe the very remarkable manner in which those queens that lay only the eggs of drones sometimes deposit them in the cells. Instead of being placed in the lozenges forming the bottom, they are frequently deposited on the lower side of the cells, two lines from the mouth, which arises from the body of such queens being shorter than that of those whose fecundation has not been retarded. The extremity remains slender while the first two rings next the thorax are uncommonly enlarged. Thus, in disposing themselves for laying, the extremity cannot attain the bottom of the cells on account of the swollen rings; consequently the eggs must remain attached to the part that it reaches. The worms proceeding from the eggs pass their vermicular state in the same place where they are deposited, which proves that bees are not charged with the care of transporting the eggs as has been supposed. But here they follow another plan; they extend beyond the surface of the comb those cells where they observe the eggs deposited two lines from the mouth.

Permit me, Sir, to digress for a moment from the subject, and give the result of an experiment which seems interesting. Bees, I say, are not charged with the care of transporting into cells the eggs misplaced by the queen; and judging by the single instance I have related, you will think me well entitled to deny this feature of their industry. However, as several authors have maintained the reverse, and even demanded our admiration of them in conveying the eggs, I should explain clearly that they are deceived.

I had a glass hive constructed of two stages; the higher was filled with combs composed of large cells, and the lower with those of common ones. A kind of division, or diaphragm, separated these two stages from each other, having at each side an opening for the passage of the workers from one stage to the other, but too narrow for the queen. I put a considerable number of bees into this hive, and in the upper part confined a very fertile queen that had just finished her great laying of male eggs; therefore she had only those of workers to lay, and she was obliged to deposit them in the surrounding large cells from the want of others. My object in this arrangement will already be anticipated. My reasoning was simple. If the queen laid workers eggs in the large cells, and the bees were charged with transporting them if misplaced, they would infallibly take advantage of the liberty allowed them to pass from either stage; they would seek the eggs deposited in the large cells, and carry them down to the lower stage containing the cells adapted for that species. If on the contrary they left the common eggs in the large cells, I should obtain certain proof that they had not the charge of transporting them.

The result of this experiment excited my curiosity extremely. We observed the queen several days without intermission. During the first 24 hours she persisted in not laying a single egg in the surrounding cells; she examined them one after another, but passed on without insinuating her belly into any of them. She was restless, and traversed the combs in all directions: her eggs appeared an oppressive burden, but she persisted in retaining them rather than they should be deposited in cells of unsuitable diameter. The bees, however, did not cease to pay her homage and treat her as a mother. I was amused

to observe, when she approached the edges of the division separating the two stages, that she gnawed at them to enlarge the passage: the workers approached her and also laboured with their teeth, and made every exertion to enlarge the entrance to her prison, but ineffectually. On the second day the queen could no longer retain her egs: they escaped in spite of her, and fell at random. Then we conceived that the bees would convey them into the small cells of the lower stage, and we sought them there with the utmost assiduity; but I can safely affirm there was not one. The eggs that the queen still laid on the third day disappeared as the first. We again sought them in the small cells, but none were there. The fact is they are eaten by the workers, and this is what has deceived the naturalists, who supposed them carried away. They have observed the misplaced eggs disappear, and without further investigation have asserted that the bees convey them elsewhere: they take them, inded, not to convey them away, but to devour them.*

Thus nature has not charged bees with the care of placing the eggs in the cells appropriated for them, but she has inspired females themselves with sufficient instinct to know the species of eggs which they are about to lay, and to deposit them in suitable cells. This has already been observed by M. de Reaumur, and here my observations correspond with his.

(To be continued.)

* This is not peculiar to the workers of these animals. Among humble bees, which also hive in society, the workers endeavour to destroy the eggs; and after the females have deposited them in the cells, they have to contend vigorously with the common bees for their preservation.—T.

Correspondence.

[The publication of any letter does not necessarily imply our agreement with the subject matter, and we do not hold ourselves responsible for the opinions expressed by correspondents.]

(TO THE EDITOR.)

Sir,—Mr. C. A. Oldman, in his letter appearing in the August issue, unknowingly criticises my methods freely. Referring to hive-making with machines, is O.K.

Mr. Oldman speaks of not using tin rabbets for the frames, and nailing on strips of petrol board around a bottom board, and a framework of battens to fit over the hive as the foundation of a roof. In these three items I know he is wrong, as I have had previous experience; but I may state here that my experience with the roof with a frame around it was without mats; with mats, it would make all the difference, for then the bees would not fasten them down. I found this frame extra work and expense on the cover, and a hindrance when working in the apiary. I want a roof that allows the insertion of the hive tool, then I can get it off without a snap. The strips of petrol board on the bottom board will soon rot and harbour dampness, and if the tin rabbets are used they serve two purposes—allow the frames to be worked under better conditions; also you can strengthen the hive by making these longer and turning the extra length on to the sides of the hives, drive a nail through and clench. This will stop that gap at the corners, and to overcome these faults I make them as follows:—Bottom Board—Two battens 26in. long 2 x 1½ (totara). Cut out of each a strip 1 x ¾ (get petrol cases with sides all one piece), lay these in the grooves and nail; cut two strips to outside width and nail underneath, and two to go in between the battens, and nail to the bottom board, one each end. Put in the back a piece of 2 x 1. This gives a half-inch flange or rest for the hive. Now put in the alighting board. To these I nail short legs 2 x 2 five inches long, just high enough to get my boots under.

Hives.—After the petrol cases are pulled to pieces and all nails withdrawn, take the two ends and see they are square by placing them together. If all right, cut a half-inch strip off each on the sides you select for the rabbets. Now nail your handle on flush with this saw cut (I use 6 x 2x 1). The strip you cut off is nailed on again half an inch back to make your ledge for frames, but put it on its edge, not as you cut it off. Put on the tin rabbets, cut two inches longer than the end, or inside measurement of the hive, turn inwards, nail on the sides, and then nail the ends of the tin rabbets to the sides, and clench. Another strip of tin likewise at the bottom makes an excellent job.

Roof.—Three battens (petrol case), 1ft. 4in. x 4in. ½in. thick; nail on to these the petrol casing when you have placed them equal distance apart. (When using petrol casing for hives cut to 20in.; for roofs leave full length.)

When cutting open petrol tins, keep close to the top and bottom to get the full length of the tin; then cut out the two seams; then join the two halves together with a seam; give it a rub over with oil on the inside; lay the woodwork with three battens down on this, bend up each end and nail, then turn down the sides. The sharp edges at each end are now folded over, reducing the overlap to

about ¾in. A coat of paint now, and this roof is done, and will last twenty years; at least, I have some thirteen years old, and are just as good now as when made. If the H.P.A. want to find some profitable use for old tins, make covers with them. The cover here mentioned is light and neat in appearance, and with the air space and cracks between the boards which the bees fill with propolis, and clear it away when they require ventilation.—I am, &c.,

C. SMEDLEY.

Te Awamutu, 11/8/22.

[It would be absolutely impossible for me to work hives without tin on the rabbets, as the propolis comes in by the pound. Often the whole of the rabbet is blocked up to the height of the tin rest.—Ed.]

* * * *

(TO THE EDITOR.)

Sir,—In the July Journal I notice that you are asking for articles of interest, and as you have never had a report from this part of the country, I thought a few lines would not be out of place.

It is about two years since we got an instructor on bee culture in Marton, when Mr. Gilling arrived, and he was welcomed by some and hated by others, especially by those who kept their bees in box hives. There is not the slightest doubt the inspector in this part has done real good work in two ways—first, by finding out those who kept box hives and prosecuting the offenders. By so doing he scared the life out of others, who took the first opportunity to destroy their box hives. I knew quite a number who followed suit. I was talking to a man the other day, and he produced a notice to show me he had received notice to clean up his bees in the spring; and I know of others too. I had the pleasure of hearing a lecture by Mr. Gilling on "Bees." I think Mr. Gilling can safely claim the honour of being the first to deliver a lecture on bees in Marton. The attendance was very poor, the night being very cold. Mr. Gilling lectured on the different kinds of bees and their habits; the men who kept them were classed under three heads—the man who kept them as a hobby; those who kept them as a side-line; and those who earned their living in the industry. Mr. Gilling gave good, sound advice to those who wanted to make a living by advising them to go into a commercial apiary for a season and learn how things are carried out. I may state here I was up at Auckland last Christmas, and I called at the H.P.A. and had a chat with the manager. He was very courteous, and gave me the address of Misses Bernard and Barnes, of Drury, and I can assure you the visit was an eye-opener to me. I spent a very enjoyable day in their apiary, and this visit convinced me of the soundness of Mr. Gilling's advice. In his address Mr. Gilling also spoke of the old-time methods of marketing honey and those of the present day, and the difference in prices. Mr. Gilling has promised to give another lecture, and also a field day later on, and I have placed my apiary at his disposal. A number of questions were satisfactorily answered by Mr. Gilling. A hearty vote of thanks was extended to the lecturer for his very instructive and interesting address.—I am, &c.,

RICHARD WATERWORTH.

Marton, July 17th.

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(TO THE EDITOR.)

Sir,—I have often noticed in looking at the photos. of different apiaries that there is a stone on top of each cover to keep the wind from blowing them off, I presume. To my way of thinking, this is a "Noah's day" idea. In the first place it looks unsightly; then when you go to open a hive you have to lift the stone off, then the cover, and when closing up replace the cover and then the stone. Why this double handling? Why not have the weight in the wood that makes the cover? If you buy timber from a sawmill, you pay the same for half-inch as one-inch. Why not get one-inch timber, and full value for your money? I have made several, and find those with the thick wood never blow off. It also makes a good job of the cover to have the piece around the outside about three inches deep. They will look much nicer than those with a weight on top, and can be handled quicker. This, of course, could only be done by those who get their timber from a sawmill and make their own. Get first-class timber, all clean heart, as it is no better than the weakest part. I would recommend totara or red pine, which will outlast the white pine by years. I use galvanised nails for making hives. They take a much stronger grip than the ordinary flat heads or even cement-coated, and they will not rust. The price is 1/3 per lb., but they are well worth it. Also use nothing but galvanised clout tacks for fastening on the Certainteed roofing. Then for something to keep the floorboards off the ground, a very cheap and good plan is to drive four stakes (about 1ft. long and 3in. thick) into the ground with a maul, leaving the stakes about 4in. above. To get them accurate, make a frame of thin boards the size of the outside of the floor-boards; then set the stakes in the corners and drive in, using a spirit-level or a straight-edge to keep them true. Totara, yellow pine, or black birch will last for many years. These are some of my own ideas, and if anyone knows of something superior, we would all be pleased to have it.—I am, &c.,

LES. H. JOHNSON.

Arapito, via Westport, 10/8/22.

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(TO THE EDITOR.)

Sir,—It was with great interest I read the report of the Conference in the July number of the Journal. Amongst the interesting items was Mr. Ward's paper on "Hubam Clover and Its History." I understand it is a seedling of the Bokhara clover, and considerably better than its

parent; also that his particular little patch was in bloom for, I think, three months. Now, I have three plants out of a probable one-eighth acre I sowed of the Bokhara clover—or, rather, seedlings from seed I obtained from a firm in Dunedin three years ago—which first set their bloom on November 14th, 1921, and they are still in bloom—exactly nine months ago to date,—and I reckon they are good for another two or three weeks. I will be pleased to show these plants to anyone interested. I do not know if there is anything special in these three plants, or if this climate is favourable, but I am carefully looking after their seed, which by the way is not so abundant as on the Bokhara clover; but if they will bloom best part of a year they are good enough for me.—I am, &c.,

E. E. TATAM.

Whakatane, August 14th.

Subscriptions Received.

[NOTE.—Should there be found any discrepancy, please write the Editor. Subscriptions received after the 20th will not appear in this issue.]

R. Beattie, Kekerangu (6/-), to April 23
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C. Beavan, Waihao Downs, to July 23
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J. C. Gibb, Puaha, to June 23
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J. S. Bates, Kakahi, to July 23
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A. L. Luke, Awakeri (12/6), to Nov. 23
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T. J. Mannox, Waihou, to August 23
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J. Walworth, Palm. Nth., to July 23
W. F. Lenz, Masterton, to June 23

Received 7/6, posted at Hamilton 22nd July. No name filled in slip.

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