Registered at G.P.O., Wellington, for transmission by post as a Newspaper.

The New Zealand Beekeepers' Journal.

APRIL 1st, 1918.

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

PER ANNUM: 5/- IN ADVANCE.

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

The New Zealand Beekeepers' Journal

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

No. 4 | Vol. 2 | 5/- 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 a small fee.

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All communications respecting the Association and Journal to be sent to FRED. C. BAINES, Kati Kati.

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EDITORIAL.

Benzine Tins.

Recently we made a few remarks relative to the use of benzine tins for the exporting of our honey to England, which we stated was a retrograde step, and one likely to do the industry a great deal of harm unless very great care was taken in getting the tins perfectly clean. Letters have appeared showing various methods adopted by different men. Some use dry heat, and vaporise the spirit; some use hot water, others use cold, and they each or all may be effective. We do not know, but hope they are, for the sake of the suppliers, if not for the reputation of New Zealand honey on the Home market. The Editor has been accused of being a bit of an alarmist on the point, and in the present issue Mr. Luke puts in a plea for their extended use, and we feel it is necessary to go a little further in the matter.

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We will grant that by taking great care you can rid the tin of any taint of benzine and a press lid has been fitted in at the top, and now what have you got? At the very best you have got a discarded benzine tin as a container for a first-class foodstuff, and to our thinking second-hand containers for selling any commodity is a very poor policy. Mr. Luke makes a point in the comparison of cost, which, if we were only getting the original guaranteed price of 4d. per lb., would hold good; but the first-class honey supplied last season has already received 7d. per lb., and a promise of more to follow, so although we have received 3d. per lb. more for that honey, and will get 9d. per lb. advance this season, we are complaining because we have to spend about ¼d. per lb. extra in providing a tin that is worthy of our produce.

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We would also point out to Mr. Luke and others that just now our honey is NOT being bottled up and sold in retail form; the prices ruling at Home absolutely prohibit it, as it would mean the retailer would have to charge about 2/- for a nominal pound pot. Our honey is being used as a sweetening agent in the place of sugar, and is sold in bulk very often

whilst on the water, and it is almost certain that the honey is going into merchants who, but for the war, would never have seen it. Now, what is going to be their opinion of us and our marketing methods at their first introduction? Here is a case opened, the lids have been put on by a (very) amateur tinker, and pressed on the side of the tin is "Plume Benzine" in fine large characters. The tin bears every evidence of a miserly attempt to save a few pence or shillings on the package, and very little credit is reflected on the produce and its marketable form.

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We should have liked a few of you gentlemen to have been with us when visiting one of the packing depots of the H.P.A. recently, and seen what some people's idea is of a slight easing of the regulations governing the export of honey. The tins were NOT entirely free from rust, and the cases—well, an attempt had been made to clean the ends, and they would have looked better had they been left entirely alone, as they had been scraped with some blunt tool, and the brand was half on and half off, and the whole package was a distinct failure as a container for a first-class foodstuff.

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We do not complain of benzine cases being used provided they are properly cleaned off; in fact, we agree with Mr. Luke that they are in many instances better and stronger cases than can be purchased. The Editor has used a great number of them, but he takes a bit of trouble to make them presentable. He carefully knocks the top and bottom off, then stands the case on a corner and by pressure springs the nails sufficiently to get the claw of the hammer under, draws all the nails, and the box is apart without damage. The ends are then planed quite clean, and with the sides are run through the circular saw to make them the exact height of a honey tin (13¾ inches). The case is then put together again inside out, and the result so far is that in spite of two transhipments his points for packing have not been less than 3½ out of 5. The whole trouble is that directly there is a little laxity allowed in the regulations, some men take advantage of it and become careless, and the careful men have to suffer. But with regard to the use of benzine tins, we unhesitatingly say they should be prohibited at the very earliest possible moment.

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Regarding Mr. Luke's complaint about the honey losing points because of the cases, we have always held this is wrong. We know the H.P.A. will advance, for instance, on B grade, although the grade note shows C, if the honey grades 83, but whether the supplier gets the benefit on future payments we do not know. We think it would be a good idea to total the points of the honey, then add on the packing points, which would not alter the grade note in any way, and would leave no chance of the supplier being paid less money for his honey because his cases were not right up to the mark.

Mr. Ward mentioned last month how he bent the strapping and nailed the lid over it to facilitate the opening of the case at the grading store. This is quite possible where one has just to put his honey on the railway, and it gets to the end of its journey without further handling, but we all are not so pleasantly situated. The Editor's honey is carted to a wharf, then carried in a hold that perhaps has a few pigs, always manure and other pleasant things, dumped on to another wharf, put in another evil-smelling hold, dumped on the Auckland wharf, and finally carted to the grading store; and if his cases were not strapped and nailed as if they were never intended to be opened this side of England, he is afraid there would be no case worth considering when it arrived at Auckland.

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Local Inspectors.—We learn there is in some quarters serious opposition to the appointment of these gentlemen, on the grounds that they do the work and the Government inspector sits in his office and makes out the reports. We think, even if there be a bit of truth in the statement, this is hardly the correct way of viewing the matter. Whilst being of the opinion that with a proper system of inspection being arranged by a Chief Apiarist, a considerably increased number of inspections could be made, we have to view things as they are, and not as we should like. Seeing, then, that the inspectors cannot or do not get round their districts as we think they should, the Department has given us the opportunity to help them and ourselves at the same time, and we think it is foolish not to take advantage of the offer. Take it from even a selfish point of view—that of keeping your own apiary clean—it surely is a "dog-in-the manger" idea that because the inspector does not help you you will not help yourself. The Editor is very glad of the opportunity of having authority to go and inspect the bees in his particular vicinity, because he is able to detect any disease before it gets abroad and damages not only himself but all others in the district. By co-operation between the inspector of the district and the local inspectors, links could be formed to embrace the four quarters of those districts to the eradication of disease and the general improvement of the industry. We beekeepers have proved that we do not wait to be spoon-fed by the Government; we have helped ourselves to bring about what we think to be of benefit, and we should certainly be weakening our case when asking for a Chief Apiarist if the Minister was able to turn round and say that he gave us an excellent opportunity to help ourselves by these appointments, which we refused to accept. Therefore, we advise all those who are capable to apply for appointment. There is no salary given, but all expenses incurred are paid, and thus show the powers that be that we are really in earnest.

Your Address written in Red Ink means "Subscription Due."

Honey Market.—The English market is still hardening, and we are just beginning to wonder how much higher it is going before the Food Controller steps in and puts a maximum value on honey. He is doing this with most foodstuffs, although we are inclined to think our honey is not being put to table use. We learn there is a firm in the Dominion offering 9½d. per lb. as a straight-out purchase, and what they get they will turn over at a profit to themselves of about 6d. per lb. We think the better way is to send through the H.P.A. and get the profit ourselves. The Queensland Apicultural Journal dated January, 1918, quotes: "Honey.—Demand fair; supply firm; quality poor to fair; prices from 3¼d. up, according to quality and condition." Somebody wrote in the Journal not long ago that it was not right for the H.P.A. to take the credit of increasing the price of honey in New Zealand—it was entirely due to the war. If such is the case, why has not the war improved the prices for our friends in Australia? and why does the Editor of the Australasian Beekeeper say: "The future of the industry depends on the export demand, and to fail to get an export market now there is a large exportable surplus will do irreparable injury to the industry for many years"? We have got an established exportable market only through the organisation of the H.P.A., and the result bears out the statement just quoted. We always have an exportable surplus, and had we not had the organisation to take it off the local market our prices during the war would have been similar to the Queensland quotation—3¼d. per lb., and no headway would have been made, war or no war, and when you consider the prices that we are now receiving and the guarantee for three years after the war, does it not occur to you that your place as a producer is amongst the shareholders of the H.P.A?

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We have been asked what is a fair price to put on honey for sale at the apiary, and we think this is best gauged by the prices offering. If 9½d. per lb. is being offered for 60 lb. tins, then put your price at 9½d. plus the cost of the smaller tin, which to-day is considerable. We should want 9/- for a 10 lb. tin, and should not do any hustling to get rid of it; but be sure and not sell at a figure that is not consistent with the prices ruling at the grocers, which will be somewhere about 2/- for a 2 lb. tin.

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It would be of great interest to us all if our readers would furnish us with particulars of their crops. We do not want a lengthy description, just the bare particulars, thus:—Spring count. Increase. Crop. These we would number consecutively and publish without identification, and the particulars given would be considered quite confidential, and put to no other purpose. Does it appeal to you?

Your Address written in Red Ink means "Subscription Due."

We publish elsewhere the letter received from the Secretary of the Department of Agriculture bearing upon our request to extend the period wherein we could obtain the pound for pound subsidy granted by the Department, as we were not able to secure the £300 in the three years over which the subsidy covered. The reply is most satisfactory, and means that we can collect over £90, provided we raise a similar sum ourselves. Now, friends, do not let it be said that we will not help ourselves in this matter. Up to the present we can only show about £35, which is a long way off our goal. We would impress on every reader to become a member either of the National or Branch Association, and so increase our funds, because funds in hand are very necessary where there is work to be done. To Mr. Pope and Mr. Kirk we desire to express our grateful thanks for the help and interest given by them on our behalf, and we trust we shall be able to prove to them in years to come that the assistance given by the Department to our industry was money well spent.

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Mark this paragraph well. We will increase the scope of our Gift Scheme, and to the first fifty names submitted by the Branch Secretaries, or received by the Secretary of the National, one of these beautiful Dandy honey spoons shall be sent. Do not think these are a cheap line imported just to give away; the landed cost to-day would be more than 2/6, and it is only by the generosity of our friends, the Alliance Box Company, who had rather a large stock of them, and let us have them at under landed cost, that we are enabled to make this offer. The Editor could sell a number to friends who have seen them. They are unique in the fact that they have a little hook in the middle which hangs on the side of the jar, preventing the spoon slipping into the honey, jam, or preserve they can be used for. This subscription for owners of up to 15 hives is only 5/- per year; from 16 to 50, 10/-; so please send your names and subscription along early, and thus secure this splendid gift. DO IT NOW! If you have already received one as a new subscriber to the Journal, it will not make any difference. Become a member and get another one, which you can make use of as a present, and so become somebody's friend for life.

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We have pleasure in drawing the attention of our experienced beekeepers to the article on "Queen Breeding," by Mr. M. Atkinson, of Norfolk, England. The Editor has been in correspondence with this gentleman for some years, and has learned of the very great pains he has taken to breed queens by careful selection and eradication, to the end of getting a strain that is immune both to foul-brood and Isle of Wight disease; and he has succeeded in getting a composite strain that he claims neither disease will affect. The article pleases us particularly in the fact that it deals with queen breeding, as against queen rearing, the latter being, as

one of our contributors pointed out, all that is practised by us. When we state that it has taken over seven years of constant and careful work to bring about the result achieved, it will indicate that our friend knows something about the business. Although Mr. Atkinson's queens are in very great demand in the Old Country, he has nothing to sell us. The article was written by invitation of the Editor, and is for general interest only. Mr. Atkinson will be pleased to answer any questions or criticisms offered; but as the article will not be completed under two or three instalments, please do not write on the matter until the whole has appeared.

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We have received from the High Commissioner for New Zealand in London a small book which is entitled "A Short Sketch of the Work of the N.Z. Prisoners of War Department in London." There is a lot of interesting reading, with photos, and we shall be glad to lend to anyone that cares to send for it.

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If any of our readers who do not file their copies of the Journal would spare the January and February issues, we should be glad of them. We secured 65 new subscribers in February, and our surplus copies were exhausted, and we require a few more to send abroad. We have now 600 subscribers, and we are out for 1,000. We sent out in March 1,450 copies, and we intend sending to every registered beekeeper in the land, as we feel it is mainly due to the fact that many beekeepers do not know of the existence of the Journal that our subscribers' list is not larger. At any rate, the two Field Days that the Editor attended, where he was able to bring the book under the notice of the visitors, resulted in over 50 new men, which seems to point out that if the Journal only gets known its usefulness would soon be apparent.

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Might we appeal to our readers that before they dispose of the whole of their crops to take notice of the appeals by the Red Cross Committees for honey. In these days of prosperity to the beekeepers it is surely no great hardship to spare a tin or even a case for such an excellent cause.

Notes from a Breeding Specialist in England.

(By M. ATKINSON, Bee Farm, Fakenham, Norfolk, England.)

An apicultural breeze from the Old Country, where we still have bees—black, yellow, golden, and all shades between in spite of the "Isle of Wight" dragon. The struggle is still keen, but those who are in the active lists are holding their own and a bit more besides. As yet it means an unremitting fight.

Involved in the problem is the necessity of finding a satisfactory substitute for the native black bee, which to many minds has failed sadly in face of that disease. Authoritative statistics of the mortality are not available, but the losses must be enormous. Surely in no country in the world can bees have been so ruthlessly exterminated every recurring winter and spring as in the United Kingdom.

The cause? Nobody knows. As contributory factors in its spread, we blame the increasing transportation and interchange of infected or potentially diseased stocks and swarms to and from various points of the country, but particularly from the South to Northerly points, the result of the increased interest in and revival of the industry in the recent past. In this we cannot be far wrong.

The "package" business in America is a duplication of this on a much greater scale.

In view of the increasing volume of complaints of bee paralysis now coming through the American Journals from widely varying points of the States and Southern Canada, here is food for thought for "Uncle Sam" and our "Cannuck" brethren. That, however, by the way.

Some hard thinking has been done, and many have come to the conclusion that the resuscitation of the native black bee, if possible, must be a matter of long years yet to come. May the realisation come, for the British black of a first-class strain is a little wonder in the wretchedly perverse climatic conditions we must too frequently put up with. To the multitude of small beekeepers making up the bulk of our apicultural whole, no more accommodating bee exists. Commercial honey producers in colonial and foreign situations, who would differ from that view, should remember their calling is "fine sport" compared to what it would be if by any chance they found themselves suddenly transported to this country with all their plant and experience. Yet we can produce honey here, and mean to continue to do so.

But we must find a substitute for our unfortunate black, and such substitute must be no mean performer. It has some trying circumstances to face from the outset.

In this direction my own special line of activity for some years has been devoted almost exclusively to test and selection of suitable bees, either in a pure or composite state, likely to succeed as a substitute. The need of the work taken up forced itself upon me in no uncertain fashion. To be wiped out of stock to the last black in one winter is vigorous business of a rough type. One stock of golden hybrids was my only possession after the visitation, and they continued to prosper—an early fact of much value.

But on the ground that a fine black might prove a better substitute than any yellow bees, six pure Carniolan colonies complete were imported direct from Car-

niola (Austria). In their pure state they held their own against disease, but hybridised by the native black drones, they were not so successful. Whatever virtue the Carniolan bee possesses as a worker, their drones are no match on the wing for the British black, and to master the handicap would have involved more work than it would have been wise to undertake, in view of the fact that Carniolan bees in England are inveterate swarmers. Prime swarms are not satisfying enough for them. I could walk around the apiary and fill my pockets with casts galore, and enough queens in a few such to queen several apiaries. Make a 3-frame nucleus, and it will swarm with the first virgin or any queen it can obtain.

The hybridised Carniolans were good honey gatherers, but the race did not impress me as of any value as a substitute, and so they went out.

Ye Editor has expressed a keen desire to make the acquaintance of a stock of pure Carniolan bees. But there is a keen edge on the Carniolan proposition, as practical acquaintance will reveal.

Sir Walter Raleigh, examining on the scaffold his executioner's axe, remarked upon the extreme keenness of the blade, but that it cured all ills. I should not fear for ye Editor's head, but I should for his queens! Nevertheless, persevere!

Italian bees, produced by queens imported direct from Italy, now began to appear in Carniolan stocks re-queened, and they did well, allowing for certain characteristics of the race brought into prominence by an unsuitable climate. On the whole they were distinctly preferable to the Carniolans, and earned their right to be noted for future work. Hybridised by native black drones, they were very vigorous workers indeed, but could not resist disease much (if any) better than Carniolan hybrids. My locality at that time, I must observe, was still affected with Isle of Wight trouble in other but small apiaries, and doubtless some of the drones from them would meet my virgins.

An early conclusion from this was that if a diseased black drone, or one in which disease was latent, mated a healthy virgin of any race, the colony headed by such a queen was doomed to disease inheritance. This I have deemed to be amply confirmed later. If the infection is of a virulent character, the new bees will not pass the first winter, but if only of a very mild type, not often the case as a rule, the colony will survive the winter with little or no loss, and give good surplus the following season. After that the disease gradually gains the upper hand.

The rule as to inheritance of disease from an infected mating applies to all bees, but where Italians are mated pure, a mild infection has not the same result as in hybridised stocks. The Italians usually continue from year to year, and show only slight dysentric symptoms in early spring, with some extra loss of field workers then. Their prolific character will, however, soon readjust that.

Such bees, however, from the queen-breeding and bee-raising point of view cannot be considered satisfactory. For the honey producer they have a value, yet it is not wise to increase from such stocks by division or swarming, for the taint goes with all such increase.

Here, then, is the further essential in successful substitution: that whatever race of bees or combination of races decided upon, the overthrow of the British black drone, so predisposed to "Isle of Wight" disease, and any other drones possibly infected or suspected must be complete, and purity of mating in the selected strain secured.

It is impossible to distinguish between the drones of some Italians and those of English blacks, and this, with the added fault that ordinary imported Italians are very poor section cappers, induced me to set aside the race for the time being, meanwhile keeping a few colonies of them going. I desired a cleaner cut distinction in the drones.

Caucasian bees, and subsequently golden Italians, had joined the lists for study and experiment, also a colony of Caucasian hybrids, reared by a hybridised queen imported direct from the Russian Caucasus. Caucasians from America were also included, but I could not see any merit in them. They were decidedly "soft" and dysentric when the new bees materialised in quantity, and it was patent from the state in which they eventually were found that the queens were the product of mildly diseased "paralysis" stock (which we do not hesitate to call "Isle of Wight" here) in their American home. Further, some 5 per cent. of bright 3-band golden bees in the brood showed hybridisation, though remote. It is possible hybridisation by diseased drones had been their undoing. They were ruled out, however, as of no value, and "snuffed" accordingly.

(To be continued.)

Comments on Passing Bee Events.

By CRITIC.

[These Comments, be it understood, are not to be accepted in the light that "Critic" thinks he knows everything about bees, because he knows he does not, and never can. They are simply intended to help in some small way the development of our industry.]

Editorial—The "National" and its Branches.—Again I have to congratulate you on the stand you have taken on a vital question as regards the well-being of the National Association. You have pointed out on page 37 as Secretary of the Association the danger of its going out of existence unless better supported than it is at present. If from the want of support it did fail, it would prove a calamity to the beekeeping industry, for no one would care, at least for a long time, to bother about resuscitating it, and without the

National we would be in a terrible mess. What, for goodness' sake, are its Branches about to allow the National to be threatened with extinction from the want of support? So far as I can see they are doing nothing or next to nothing to encourage an addition to their membership roll, and the fact that the "Christchurch Amateurs" should have been left to form a Beekeepers' Club is a direct reflection upon the Canterbury Beekeepers' Association, which should have secured the 50 members instead of letting them start a separate Association. There can be no excuse: the Amateurs simply had no confidence in the older Association, and for that reason formed one of their own. The Canterbury Beekeepers' Association is, I presume, not one whit worse than others in this respect, and until all the Branches of the National wake up and realise the necessity for doing something to encourage additional membership, the National and the industry generally must suffer.

Pages 34-5—**Cappings Smelters.**—I have used the "Baines" machine, and seen the others in operation, but for rapid work, especially when melting dense honey combs, the larger heating surface of the Bartlett-Miller smelter, and the facility for separating the slumgum from the wax and honey, undoubtedly makes it superior to the others. Root, in his last "A B C," speaks well of it, and doubtless the inventor will be recompensed for his skill and trouble in the sales of the machine. You speak of the heat, Mr. Editor. Now, the melting point of wax is 145 deg. Fahr., and it would need the machine to be at least 5 deg. warmer to melt cappings rapidly, and in the case of old dense honey combs another 10 or 15 deg. of heat would probably be required to get through the work quickly, so that, say, 150 deg. for cappings, and from 160 to 165 deg. for old dense-honey combs.

Page 38—**Grading Points.**—I consider the Executive of the National, the Department, and all concerned were wise in not altering the present scale of grading points, and hope that those who have honestly differed in the past will now accept in all good faith the combined judgment of the above bodies.

Page 39—**The Box-hive Men.**—It is really amusing, although irritating at the same time, to read periodically that it has been "**decided**" to take action against box-hive men. This has been reiterated with such regularity during the past nine years that I have come to look upon it as a departmental figure of speech, with no more meaning than has that other delectable phrase so dear to the heart of red tape—"The matter is receiving attention."

Pages 40-1—**Percy Gill's Letter.**—It is well that Mr. Gill has put the whole matter of the formation of the "Amateur Beekeepers' Club" before your readers, as I know it was greatly misunderstood before. It is to be hoped, however, that the two parties will eventually see their way to combine their forces and set a good example to other Associations by properly carrying out the rule of the Association—"to promote bee culture."

Page 42—**Boxed Honey.**—As soon as things become normal again, boxed honey, suggested by Mr. James Allen, for export should certainly have a fair trial. Under the conditions now obtaining, as explained by the Editor, it would be very risky in the English climate to have such boxes side-tracked on the railways merely protected with tarpaulins—perhaps only partially protected—during heavy storms. Better stick to the tins meanwhile.

Ibid—**Colour in Grade Notes.**—Is Mr. Hooper Teed quite correct in his assertion that colour of honey, or different shades, between white and dark amber do not count in points provided they are all equally clear? It seems to me very odd if it is so, as the colour points might in that case readily turn the scale and place an unmistakeable second grade honey in the first grade. Supposing, for instance, a bright coloured light amber is awarded 10 points, and its total points reached 94, placing it in top grade A, it is easily conceivable that a decided B, or second grade honey, might be worthy of 84 points apart from colour, when if it could claim the same number of points independent of its difference from A grade for colour, only because of its brightness, it would under these circumstances be put in A grade, where it had no right to be: that is how it appears to me. Turbidity has really nothing to do with colour. If it were, as Mr. Teed suggests, only a matter of clearness, then colour would have no place in grading.

Ibid—**Grass Around Hives.**—Of all the novel ideas for keeping the hives clear of grass, the guinea-pig business is the most novel of all. In imagination I was transported back to my happy white-mice days. I am afraid, Mr. Kirk, your idea will not catch on. Why, with 400 or 500 hives, one would need hundreds of guinea-pigs and a lion-tamer—I mean a man—to look after them.

Page 43—**Perforated Beans.**—Mr. Millett's informant and you, Mr. Editor, are wrong if your statement that "humble bees do damage the blossoms of broad beans" is meant that the perforation of the corolla destroys the means of cross fertilisation of the flower and production of fruit. I am aware that it is a common idea, but it is wrong, nevertheless. So long as the anthers and stigma of the blossoms are not destroyed they are capable of cross fertilisation and fruit bearing, whether the corolla be perforated or not. For instance, supposing a bee or moth or other agent visit the flowers in a legitimate manner, they will get dusted with pollen and convey the latter to other flowers, and so affect fertilisation although the corollas be punctured. If the punctures only are visited, no fertilisation will take place; that is how the mischief comes about. I am not so certain that all the blame for punctured corollas can be fairly laid on

humble bees. I have watched very closely indeed for several seasons, and have failed to see one of them on my beans, and yet the tubes were punctured soon after the blossoms opened.

Page 45—**Getting Queen Cells Started.**—Methinks the subject of the article of Miss Emma Wilson you reprint from the American Bee Journal is by no means new in New Zealand, as it was introduced into this country several years ago.

[Our Editorial remarks on that article were crowded out, else you would have seen we referred to an illustration in the "Farmer" of results obtained by Mr. Hopkins.]

An Ideal Brood Chamber.

By J. S. COTTERELL.

[In the absence of Mr. Cotterell, this paper was read by Mr. E. W. Sage at the annual Field Day of the Waikato Branch at Ruakura.]

The purpose of this paper is to show how to conserve the natural heat of the bees, also to conserve their energy, and to conserve their food supply, more especially during cold or changeable weather when honey is not being gathered to any great extent. I will endeavour also to show how radically different is the treatment during warm weather, when a honey flow may be expected, when swarms may issue, and when extreme ventilation is needed to keep the interior of the hive at normal temperature, at the least expenditure of energy (vitality) on the part of its inmates.

I take it as an axiom that the arrangement of any modern hive as regards the brood chamber should be in accordance with the needs of the colony that occupies it; therefore, I advocate that a brood chamber to be ideal should admit of contraction both horizontally and vertically. The most advanced apiarists in America now hold the view that for wintering and springing the bees, for best results, should be confined to only such combs as they can cover: in other words, contract the brood chamber, and this is my experience extending over several years.

Again, during or preceding a honey flow, it is sometimes an advantage to contract the brood chamber to prevent an excess of brood, which not only consumes a large amount of the bees' energy and vitality to produce, but in the course of events are likely to be ready for the field only after the honey flow has closed for the season.

As will be shown this summer contraction is on the Demaree plan of elevating part of the brood to the top of the hive, thereby bringing about the condition of an incomplete brood chamber, on the same principle as scattering brood about the hive, a sure way to discourage swarming, and in the former case a great incentive to rush the incombing honey upstairs to the top storey, just where you want it, instead of blocking out the queen below by storing in the main brood combs.

In any hive manipulations it is advisable that frames and hive bodies be of standard size, so that interchanges can be readily made.

During spring and winter in this climate we are subject to sudden changes of temperature as well as high and cold winds, the latter being accountable for the loss of much young brood (through chilling) in exposed situations, and this I shall further allude to, and show how much of this loss can be avoided by the frame I advocate.

As has already been mentioned, an ideal brood chamber should admit of contraction both horizontally and vertically, and at the same time admit of being readily converted into a well-ventilated chamber for warm weather and honey flow conditions. The one I advocate and use with success consists of an ordinary 10-frame body, with the addition of a half body on top or below, as required. The full body has nine frames and a moveable ⅜-inch division board bee space from cold side of hive; the half body (super size) has also nine frames, but with a fixed division board on cool side. It is used in connection with a wood and wire queen excluder, thereby confining the queen to the brood combs necessary according to the season. As indicated, both sections of the brood chamber have nine frames of comb each, and it will be found that in normal colonies brood will be raised on the comb surface right next the division board in both top and bottom sections, showing that the temperature has been conserved to admit of this. The hive is raised from the bottom board surface ¾-inch on suitable fillets, blocks control the front entrance, and the back fillet is arranged to swing open for further ventilation in hot weather.

The nine frames consist in each case of five closed end and four plain hanging. For winter and spring use the closed end ones; occupy the centre of the hive body; thus you have a compact or, as it were, an insulated brood nest, which will defy the worst and coldest weather we experience in this locality, for it can readily be seen that there are four ranges of comb the bees can cluster in, with a lateral passage between, perfectly insulated as regards extremes of temperature and high winds or draughts that may enter the hive. It will be found that this arrangement is suitable for a strong colony, but for a medium colony it is well to contract horizontally by removing the half body and confining the bees to nine frames only. If a weak colony that it is preferred to winter instead of uniting, it is confined to the half body or to the full body on three or more closed end frames next warm side of hive, with division board giving a one-inch entrance.

Now, about the vertical contraction referred to, why the bees do this automatically themselves, arranging their brood nest so as to obtain the protection afforded by

the closed end frames. For summer use and when a honey flow is expected, a radical change is made, as conditions call for ventilation and ready access to all parts of the hive, so all that it is necessary to do is to alternate the closed end frames with the plain ones. This is undoubtedly spreading brood, but as it is done in warm weather and the colony has plenty of bees no harm will result to the brood. In a spring and early summer honey flow, using a queen excluder with supers above, the half body, if not occupied with brood, may become honey blocked (an inducement to swarm), in which case place it below the full body, first breaking the cappings of the honey, and the bees will soon remove the honey to the supers above, as they are adverse to having sealed honey below their brood. This will give the queen more room, and, if a good one, it can be left till end of season, when it will be found to contain little else but pollen, the very best asset you can have for spring breeding or to distribute to other colonies short. Being in half frames, it is readily removed if on top of main brood chamber, with little disturbance and easily exchanged for other empty combs from colonies requiring pollen to keep up the breeding.

The vagaries of colonies differ. Some will spend a large part of the honey season raising immense quantities of brood to the loss of honey in the supers; others will fill out their brood combs and put their energy into gathering honey; whilst others are intent on swarming only. It is generally found that a hive containing a large amount of brood and young bees contract the swarming fever readily, and one reason is that it is due to restricted function of the young bees, as at this time they are primed with a large amount of nitrogenous food for the purpose of feeding larvae and the secretion of wax for comb-building, and by restricting them in this direction not only is discontent engendered, but a quantity of wax is wasted that would otherwise be built into comb. If on examination queen cells be found, or if in the opinion of the apiarist there is sufficient sealed brood in the two brood chambers, one or other or both can be elevated to the top (Demaree plan), and a new or temporary brood chamber started below, provided no increase is desired. If increase is desired, adopt the Alexander plan, say, with main body box, the half body going to the top of hive to force up the honey, care being taken to cut queen cells in the top half in eight or nine days' time. If no increase is desired, return the original brood chambers to their position on the bottom board after 21 days, or after honey has been extracted from them, and no swarming will result.

Both these operations by elevating brood will control swarming and give a moderate increase, or keep all the working force of bees together if done at the right time.

After the honey flow (February and March in this locality), when going through the hives, reassemble the five closed end frames to centre of hive, leaving two plain on each side, and the bees will appreciate this attention in forming their winter brood nest and low consumption of stores.

For winter ventilation give 8 in. x 3/8 to 3 in. x 3/8, according to strength of colony. Spring ventilation can be still further contracted to promote breeding, and on a hot day considerable fanning will be noticeable, but only for a short time. It is a safe rule to follow that it is better at this time for the bees to be too warm than too cold. For top protection I use a double cover with oiled mat on the Alexander plan, as my experience is that the bees prefer a sealed cover and use up less winter stores in maintaining the necessary heat for their welfare and breeding in spring especially. Summer, with a honey flow, is a different proposition, and a through or upward ventilation is advisable, combined with shade.

There will doubtless be apiarists who will adversely criticise this ideal brood chamber, and to such I would say, try one before you condemn it, and I think you will be agreeably surprised at the result.

One important thing must be admitted, that in autumn, winter, and spring the vitality of the bees is conserved, which goes a long way to ward off disease. As a matter of fact, since I adopted this arrangement of frames, I have had no return of foul-brood.

For spring brooding it cannot be excelled, as the protection afforded by the closed end combs is always at hand, and colonies so provided are away ahead of others having only open end frames, it being understood that colonies are headed by a good queen and not a skim-milk one.

Beekeeping for Beginners.

MONTHLY INSTRUCTIONS.—APRIL.

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

By the end of this month all the hives should be fixed up for the winter, and to ensure that the bees shall come through all right it is necessary to see to one or two things.

We will take it your bees are all queen right, and there are no signs of disease. How are they off for stores? because lack of sufficient honey to last them over the winter well into early spring means a hive badly handicapped at the beginning of the season, and a danger of them being starved out before then. If your bees have not good sealed stores in every comb in the brood chamber, then you must feed them with syrup, and feeding syrup for winter stores and feeding in the spring are two different matters. To feed now you will require a syrup made up of two of sugar to one of water. Fill a kerosene tin with water and bring it to the boil, tip it into

a bath, then stir vigorously whilst two kerosene tins of sugar are being put in, so that it is all dissolved.

All feeding must be done within the hive, and the operation carried on just at dusk, when all is quiet in the apiary. Of feeders there is no end, and I am not going to advise you on any particular one. Any tin of a decent size with a press lid will make as efficient a feeder as you want; a 10 lb. honey tin is just "it." Punch a number of holes in the lid, fill it quite full of syrup, press the lid on, take an empty super with you to the hive to be fed, carefully take off the cover and mat, not disturbing the bees too much, put the empty super on, turn the tin of syrup upside down on top of the frames, cover up, and the bees will carry the syrup down and store it in the combs. Make sure there are no holes where robbers can get in between the super and hive, else you will be in trouble. Repeat the operation where necessary, and when all have plenty take the empty super away and make all snug.

Take particular notice of your covers, as leaky covers are a source of many troubles, and if you come across any that are at all weak replace with sound ones, or repair the leaky one with rubberoid, or similar substance. Before stowing away your supers, overhaul them a bit, and repair any places that need it. Clean away the propolis from the edges and the rabbet on which the frames rest, and if possible give them a coat of paint, which means long life to your supers.

Your extractor, tank, honey knife and all appliances connected with the honey should be well washed with boiling water and thoroughly dried before putting away till next season. All appliances now are very expensive, and it behoves us to take a bit of care with those we have.

For the next three or four months there is very little work needed at the hives; in fact, if you have followed these instructions there will be nothing, so I intend to give you an article or two on the joy of making things. We shall want a few empty benzine and kerosene cases for our timber, one or two empty tins, a few tools, and a workshop, and I think we will spend a pleasant and profitable time together.

THE EDITOR.

District Reports.

TARANAKI.

Extracting is in full swing, and the crops, generally speaking, are average, being slightly better than last season. The weather is inclined to be cold for March, and not such a good month as usual for queen-rearing.

The first week in March consisted of strong cold southerly winds, and most queens flying at that time were lost.

H. R. PENNY.

Okaiawa, 17/3/18.

"CANTERBURY TALES."

By E. G. WARD.

I suppose most Canterbury beemen are now busy getting colonies into winter quarters and taking off the final surplus honey.

The weather during the last month has been very favourable on the whole, and in the Ellesmere district there has been quite a contented hum among the bees, which seems to indicate that some honey is still being gathered.

In going through the brood boxes, I was agreeably surprised to find that most colonies were well supplied with winter stores, and in consequence I have been able to extract a little more than I had expected. There is a good showing of clover even now, but whether it is yielding much I am doubtful.

Mr. "Critic," you are not playing fair over that queen-rearing business. If you look up the report of my remarks at the 1912 Conference, you will find I said that queens ought to be sold at 3/6 each if bought in large numbers; also I did not stipulate that they were to be "tested." After reading the letter from the Misses Barnard and Barnes, it looks as if there was some justification, although I failed to succeed with the wholesale plan. I am now going to confess to failure by the oft-quoted Swarthmore plan of shaking bees into a swarm box. How many times and how many varieties of colonies I have tried I do not know, but more than I care to think about, and yet I have never succeeded in getting a batch of cells started. I believe I did get a solitary one once, but used the jelly for a batch "a la Doolittle." Yet there are others I know who have no trouble in using this method. However, after all I am going to agree with you. I am satisfied after the experience I have had that a tested queen is well worth 10/-, and I would not care to produce queens for less in this locality.

There has been a good deal said in "Gleanings" as well as in our own Journal about the honey method of queen introduction, and I decided to give it a trial this season. Queens have been pretty hard to rear, and a mighty lot of virgins got lost in mating, but I risked five nice-looking queens. They were doing splendidly in the nucleus hive, and it was with fear and trembling that I followed the instructions to the letter. Every one was accepted, and got laying, but I did not like their looks after they were established in the new home—appeared something like a man or woman would after being dragged backwards through a gooseberry bush. To make a long story short four out of the five were superseded by the bees within a month. The remaining one is going strong, and by her work should be a "ringer." I feel thankful for small mercies, but I am going back to the cage plan after all. I may mention "en passant" that I have had similar experience with the "smoke plan," which was all the rage three or four years

ago. Now, Mr. "Critic," just gloat over this, and I promise to take all you say in good part.

I suppose everyone knows the motto, "United we stand, divided we fall," but it is apt to be forgotten sometimes. The Editor's remarks in last Journal illustrate the truth of it, and I endorse all he says. My chief reason in referring to the matter is to try if I can induce the members of the newly-formed "Bee Club" in Christchurch to become an ally. It is quite plain that the Secretary (Mr. Gill) has got "bee fever" in a very bad (or shall I say aggravated) form. I had it myself, and I do not think it will ever get out of my blood. If any of the members take the Journal, and I hope they all do, I can promise them a hearty welcome at the meetings of the Canterbury Branch of the National, and I have not the slightest doubt that there are many of the members who will be only too glad to explain some of the modes of treatment by which "bee fever" is cured, or at any rate alleviated. In other words, by joining in with us you will get the benefit of all the members' experience by asking for it, and all the advantages of National membership for a very small fee. I understand that it is probable that monthly meetings are to be reverted to, and I am sure the enthusiasm of the Bee Club, added to the sober experience of the present members of the old Canterbury Beekeepers' Association, will work wonders. Think it over, ladies and gentlemen, and "DO IT NOW."

It would seem from a conversation I had with a previous customer of mine a short time ago that the H.P.A. has at least one kind friend in Canterbury. I was informed that there are only 28 shareholders, and that the operations of the Company do not count for much. Several other items of information were mentioned, all of which go to prove that if possible somebody is going to "put a spoke in our wheel" if he can. So far as I know the Company has not done much business here, and I just draw attention to possible "snags." The old order of things is not dead yet. There are so many who keep bees as a "side line," and accept almost any old price, that a vigorous campaign is necessary to dissipate some of the foggy ideas prevalent about co-operation in honey production.

I am sorry only one reader is willing to get his journal bound. Perhaps there are others who, like myself, are going to do it for the "fun of the thing." I shall probably do mine this winter, as I like to refer back sometimes, and there are many things which are forgotten if only read once and thrown aside. I have "Gleanings" from 1912 till the present, and with other bee books they make quite a library.

If you want a foretaste of the hot place, use a Baines capping melter.—(Contributed.)

Your address in red ink means subscription due.

Correspondence.

BENZINE TINS AND CASES.

(TO THE EDITOR.)

Sir,—You and some others are giving the benzine tins for exporting honey some severe criticism, and perhaps you may be right. Mr. C. A. Oldman, on page 30 (February Journal) gives his experience and easy method of cleaning benzine tins, and also has had no complaints after seven or eight years' trial in putting honey up in these tins. Now, I understand that when our honey is shipped Home, it is not put on the open market in bulk, but is heated and emptied out of the tins, and reput up in suitable pots, &c., and our tins either new or old (clean benzine tins) are thrown out. If this is correct, then why not make use of the benzine tins and save the expense of new ones? Economy is the order of these times.

New honey tins landed in our workshop this season cost 2/3 each. Benzine tins with push-down lid fixed cost 4d. each, a saving of 3/10 per case. Certainly the new tins hold 60 lbs. nett, while the benzine tins hold only 56 lbs. nett. However, allow 19 cases to the ton, which means a little over the ton in the 60 lb. tins. We can save £3 12s. 10d. per ton. Then, again, re using benzine cases for putting our honey tins in. A clean Shell benzine case when planed over by a carpenter looks every bit as good as and much better than some of the export cases I have seen. We have bought hundreds of these empty cases, and they cost us, landed in workshop, 6d. each, against new cases in flat 2/- each. Thus, we save 1/6 on case and 3/10 on tins, or £5 1s. 4d. per ton. So why not make use of that which otherwise would be wasted, and I do not see why we should have points deducted from our grading notes if put up in the benzine tins and cases, providing the cases are well cleaned and in good order, and the tins free from rust, &c., and if there is any fault to find, why not the grader condemn it straight out? I myself cannot see why the honey should suffer for the tins or cases in the way of points. If beekeepers put their registered number on top of each tin so that should there be any fault overlooked by our graders, it could be easily traced in case of bad tins or taint in honey, &c.

Now, Mr. Editor and others, do not forget I have written these few lines on the understanding that our honey is not put on the open market. If it was, I would say condemn benzine tins, but not the cases.—I am, &c.,

A. L. LUKE.

Awakeri, 16/2/18.

* * * *

(TO THE EDITOR.)

Sir,—This letter is not intended for publication in the Journal; it is merely to give you an idea of beekeeping in this part of ——, so you can make a few remarks in your Editorial if you think it

advisable. I have no desire to cause ill-feeling with the beekeeper I will refer to; in fact, he is more to be pitied than blamed.

For eight or nine years I have been fighting foul-brood with diseased colonies all round me. These outside colonies have gradually died out, till practically only one beekeeper is left within a mile of my apiary. Of course, as these colonies died out, my bees were good enough to clean up all their honey; that is what kept the disease going with me all these years. Time after time I felt like giving in, but somehow beekeeping has too strong a hold of me, and each spring I was as keen as ever. For two years running I melted up every comb, 2,000 or more each season. Last season I had only five cases, and this season none at all. I have been shaking hands with myself this season, thinking the foul-brood trouble was done with.

Well, to get to business. A beekeeper less than a mile from my apiary made a start about four years ago. He had no previous experience that I know of. He bought up colonies here, there, and everywhere, mostly in box hives, made hives, and transferred the bees. For two years he put in a lot of work and looked after his bees properly, but evidently he found he was not getting rich as quickly as he thought he would, consequently he has not bothered working the bees the last two seasons.

I intend starting one or more out-apiaries next season, so on hearing he wanted to sell his hives and bees, I went to make a deal. I found him away, but his son showed me the apiary. Directly I saw the apiary my suspicions were aroused, so I obtained permission to take an inventory of the hives, &c., and examine a few colonies. This is what I found:—

40 hives (some supered, others only brood chambers) on stands.
4 fair colonies (working in the supers).
8 weak colonies (mere nucleus).
28 dead colonies.

I examined a few of the dead colonies, and found the combs rotten with foul-brood and wax moth larva, and a splendid home for mice. Three of the best colonies I examined were diseased. I did not bother examining any more; it was obvious that they were all diseased. I lifted the covers of every dead hive, and every one of them still have the combs left in. One or two are just being cleaned out by robber bees; the rest are without honey—robbed out long ago.

I have reported this matter to our inspector and also to Mr. Kirk, but do not intend waiting for their assistance. By the time the red tape gets finished with probably it will be well into winter. I want a clean up before the honey flow is over, so if possible I intend buying this beekeeper's bees, hives, frames, &c., including the foul-brood germs, wax moth, larva, and all complete, and cleaning up to suit myself.

Our inspector has only paid one official visit here, some three years ago. I saw the result of his instructions soon afterwards. One beekeeper with three or four colonies (300 to 400 yards from my apiary) was ordered to treat for foul-brood, and by jingo! they cured it all right. The frames were shaken out of the hives into the long grass and the empty hive bodies thrown into the rubbish heap. No doubt those bees were cured, but I do not feel anxious to have this 40 colony lot cured by similar methods.

Mr. Editor, this is not a fairy tale. I assure you every word is true, so if you think it advisable to mention this letter in the Journal, you can make use of any facts I have written. I do not wish my name or the exact locality mentioned because of the beekeeper concerned. As I said before, I consider he is hardly to be blamed, because no doubt if the Apiaries Act had been carried out he would have had more encouragement to continue looking after his bees. Of course, our inspector will pick who supplied the information, but that I do not intend losing any sleep over.—I am, &c.,

———.

P.S.—I know it is against the law to deal in diseased bees, hives, &c., but we do not have any Apiaries Act in these parts.

[Although the above letter was not intended for publication, we have taken the liberty of doing so, that it may be known to all the splendid effect our Apiaries Act has had on the industry after eight or nine years' operation. We pride ourselves on the excellency of that Act, its far-reaching powers, its penalties, &c., &c., but when you come down to its effectiveness this letter supplies it. Here is a case that, unless the man had been an enthusiast, he would have given up at great loss, and now, just when he had got his apiary about clean of disease, he finds an apiary less than a mile away rotten with it. Please note: one official visit in three years by the inspector! Good heavens! And we are told by those responsible for the enforcement of the Act, when we ask for assistance to cope with this sort of thing, "to wait till the war is over." Bah!—Ed.]

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STARTING QUEEN CELLS.

(TO THE EDITOR.)

Sir,—The method of obtaining queen cells by the horizontal comb plan, as explained by Miss Emma Wilson in the American Bee Journal, from which you reprint her article, was known and tried in New Zealand ten years ago. In the season of 1908 I first raised cells on this method at the Waerenga Apiary, and at the initial trial 60 good queen cells resulted. Following this 80 good cells were raised on the one comb at the Ruakura Apiary. Photos of the prepared comb and the finished 80 cells were taken by myself; they were reproduced in the "New Zealand Farmer," together with a full explanation of the plan, and also in the last edition of my bee manual, where the history of the process is given.

I might almost claim to have introduced the scheme into America, for until I sent copies of the photos and an explanation to Dr. E. F. Phillips, which he made known before a meeting of a New York Beekeepers' Association, nothing had been done in this line in the States. Photos and an explanation from myself subsequently appeared in "Gleanings," and Dr. Phillips in his excellent book, "Beekeeping." in giving an illustrated account of the plan, has named it "The Hopkins Method." I do not, however, consider it deserves that name, as it originated, I believe, in Austria.—I am, &c.,

I. HOPKINS.

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(TO THE EDITOR.)

Sir,—"Canterbury Tales" are tales of woe when read from the queen-rearing point of view. My experience with the Latham method was far more encouraging. Here it is. I reared no less than seven batches of thirty grafts each, and in no case was less than 28 accepted. I removed the queen of the hive selected for rearing when it was easy to find her—that is, in the forenoon. The same evening I removed the brood, and placed eight frames of uncapped honey and a frame of cell-cups in its place. Next morning, as early as it was safe to handle young brood without fear of chilling, I grafted, without jelly, the warmed and polished cell-cups. The hive was then severely left alone until the tenth day, when the ripe cells were placed into nuclei. It was always my practice to examine the young queens by opening the ripe queen-cell. This year I had little need for this, and my queens for the most part are excellent, and all are as good as I have reared by any other method I have tried.—I am, &c.,

H. C. WEDDE.

February 15th, 1918.

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CHIEF APIARIST.

(TO THE EDITOR.)

Sir,—I wish to clear up a point which seems to grieve Mr. Hopkins, judging by his remarks on page 41. He accuses me, when Editor of the Journal, of appropriating his ideas from the "Farmer" without acknowledgment. I am not a thought reader, neither did I read the "Farmer" as a rule. I did not subscribe to it, neither did Mr. Hopkins subscribe to our Journal, and we were not on each other's exchange list—what need when the "Farmer" still claimed to be the official organ of the National Beekeepers' Association? Clearly it must have been a case of great minds thinking alike. But the fact of the matter is that in 1916 the Southland Beekeepers' Association sent, amongst others, a remit to the Conference suggesting the appointment of a Chief Apiarist. For some unexplained reason this remit was allowed to drop so quietly that nobody heard the fall. I noticed it, and wondered why. The resolution carried at last Conference justified my bringing the matter forward in time.

There is no doubt that a boss is wanted for the Apiary Division. The state of affairs that has existed in the Canterbury district for the last few years could have been avoided under proper supervision. Had a firm hand been in charge much unpleasantness would have been avoided, and we would not be in want of an inspector here now. I am not so sure that it would be a good plan to have the National Association or even the Conference pass their opinion on a prospective appointment. While it would appear to do away with any hole-and-corner business, it would not necessarily procure the best man. It would not necessarily secure a strong character, which is the most important qualification, but it would rather help a showy, popular man, or the one who had the most friends at the Conference. If a name were submitted and not approved, it would then be up to the Conference to suggest their choice. Could we agree? I wonder! I rather fancy that things would get lively if there were too many nominations. On the whole I think we had better trust the Commissioners.—I am, &c.,

W. B. BRAY.

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(TO THE EDITOR.)

Sir,—I would have liked to have seen some comment by you, Mr. Editor, on Mr. D. Kelly's paper re "The Beekeeper's Paradise." He writes to keep others from making the same mistakes as himself. I think he should blame himself and not the district. My advice to him would be, "Try again." When weather is at all warm give extra ventilation, also a super of empty combs between those occupied by the bees; keep the extractor going, and do not allow the frames to get more than a little capping on. When the air is dry, the days hot, and the honey pouring in from the swamp, seven to ten days is long enough between the extractings.

Hoping the above may help Mr. Kelly and others,—I am, &c.,

L. GLENNY.

Waipawa, 16/3/18.

* * * *

(TO THE EDITOR.)

Sir,—While on my 14 days' leave to England from the front, I took advantage of the opportunity and visited Bristol, with the view of having a look over the plant put up by the Bristol and Dominions Producers' Association for the purpose of treating our New Zealand honey before placing same upon the market. I can now say that I have seen as an accomplished fact the dreams and hopes of, say, 5-10-20 years back of a number of the leading and far-seeing beekeepers of the Dominion, and through the work of the Beekeepers' Associations and a few of its most enthusiastic members through the H.F.A. and Bristol and Dominions Producers' Association we have now in existence a plant bottling pots of honey by the thousand ready to be placed on the market in thou-

sands of the grocers' shops of the United Kingdom, and which is to my mind the key of success to the beekeeping industry of the Dominion.

Shortly after arriving at Bristol I called at the office of the B.D.P. Association, where I saw Major Norton, who takes a special interest in our N.Z. produce, and especially our honey. Here I got a very cordial welcome. From here we went to the bottling department, which is only a short distance from the office. This is in two large rooms, where there are a number of workers all busy handling the honey. There was the honey in bulk as it arrived at the depot from overseas, the tanks for liquifying it, the vessels for running it off into the various sizes, and kinds of receptacles, and which after being packed into neat boxes are sent out to a thousand and one different shops, big and small. Here we have a system which should commend itself to every beekeeper of the Dominion in its simplicity and business-like method of getting the honey right from the hive as it were to the buying public with the least possible cost and worry to the producer and the best possible return; while again the producers must realise that to have this part of the handling done by those who are professionals in the business world, and who are right on the spot for buying in large quantities all material required, and also distributing large quantities, is a great saving in itself. Again, we must realise that all producers are not necessarily gifted with commercial business ability, no matter what like we may be at producing honey. When we realise this, "and some have already," then there will be a big step forward in the right direction. There are other advantages of having a system like this. Permit me to mention one—viz., the matter of labour—the time saved at the apiary "at a time of the year when a beekeeper's time is golden," by putting the honey up into large receptacles instead of small 2 lb. and 1 lb. pots, which time would allow the producer to keep more bees and produce possibly from one-eighth to a quarter more honey.

Major Norton was only too willing and pleased to have me or any other New Zealand producer in to ask questions, look over the books, or learn any further information that would tend to bring us more together and bring about a thorough understanding between us in New Zealand and his department.

I would like to point out and emphasise as strongly as possible that if we are to take advantage of the splendid opening and already good foundation laid and bring about the best possible results, and to one who looks to the future, "we cannot make too much of this point that the future of the trade must be well to the fore in all our present actions." There appears great possibilities in store for this New Zealand produce. But to get the best, a thorough understanding on our side and this side is needed and a thorough confidence one in the other. Of course, I do not say that we have not got this to a great extent at the present, but it could be strengthened; then the same thing is needed in the beekeepers of the Dominion and our Associations, and this will bring about the conditions aimed for—viz., all the honey shipped through the one channel, and the best possible article brought within reach of the vast field of consumers at reasonable prices, a regular supply, and a fair return to the producer. I feel sure that we are on the highway to this state of affairs. Some of us to bring the industry up to the present good foundation have had to sacrifice good steady local markets and tempting prices, while others have not only faced the above but have put in much hard work; but after visiting Bristol I am more confident than ever that the near future, if not the present, will and is justifying all risks and inconveniences put up with in the past.

Another word. We are not alone in this matter, as there are large quantities of United States, Californian, Cuban and Chilian honey coming into Britain to-day, and I was able to sample some, and I must say that the quality of some is very good, and if we do not see and grasp our opportunity—in not pulling together and studying the future at a possible small sacrifice now—these brands will, though not absolutely, cut us out, affect us materially; but given a fair chance, and the H.P.A. supported by every producer in the Dominion that the quantity and quality be kept up, the outcome will, I feel sure, be more than satisfactory to all.—I am, &c.,

3/1715 Cpl. T. H. PEARSON.

France, 18/1/18.

[The above is first-hand evidence of what is being done for us by our agents in England, and is splendid reading, particularly so to the Editor, who has contended all along that our system of marketing is perfect. We are sure Mr. Pearson will not be offended when we state that he was one of those who had built up a splendid local market for his honey, and was at first very reluctant to give it up and place the whole of his output in the hands of the H.P.A. But he has now seen what the result is for himself and the whole of the beekeepers of the Dominion, and only emphasises the fact that absolute loyalty to our organisation is the salvation of the industry.—Ed.]

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(TO THE EDITOR.)

Sir,—Re embedding foundation by electricity. I have tried every method, and none of them has been a success. For the past three years I have not embedded at all, and I scarcely ever have a faulty comb. The frames are threaded with three wires, each one tacked independent of the other, and the foundation placed in and out between the same, the foundation being fixed to the top bar with hot wax, not wedges. If

frames so fixed and drawn out in the supers, they will be absolutely perfect, firmly fixed to the bottom bar, and no drone comb.—I am, &c.,

C. J. C.

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(TO THE EDITOR.)

Sir,—We have pleasure in enclosing herewith a sample of comb foundation manufactured in Japan. Owing to the difficulty of obtaining supplies from the States, and the shortage of wax in the Dominion, we are compelled to look to outside markets for supplies. It may surprise and interest you to know that Japan is quoting foundation at a higher price f.o.b. Kobe than the retail price in New Zealand, and that she quotes crude beeswax at £350 per ton f.o.b. Kobe without any engagement as to deliveries.—We are, &c.,

ALLIANCE BOX CO., LTD.

[These samples were quite equal to that imported from America, but the price is very high, and we expect all supplies that have to be imported will be the same.—Ed.]

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(TO THE EDITOR.)

Sir,—I was pleased to receive copy of Beekeepers' Journal dated June 28th, the first since leaving New Zealand in June last. Although taking only a small interest in beekeeping before coming here, I will most likely go in for it further on my return.

When at Abbassia (close to Cairo) I was told there was a hive of bees not far away, but I did not see any, nor have I seen any around here. About a month ago, close to Jaffa, about twenty miles north-west of Jerusalem, we bought two milk-tins (soldered up) full of liquid honey for 2/- each from a native. It was dark coloured and watery, and if collected from orange flowers I cannot say I liked it. Orange trees seemed to be the principal honey-producing agent there. They were bearing fruit at the time, but no blossoms. Out in the fields there was nothing growing but a little coarse grass. Some vegetation was beginning to sprout after the rain. It rains very little here except in winter time. Later in the day a few yellow bees (not like our Italians in New Zealand) came around and helped themselves to some of what was left.

When riding through a village a day or two before I noticed twenty or thirty hives in a yard next the road. They had flat roofs on, and appeared to be frame hives and empty.

At the canteen the other day I priced some pound tins of English honey (from Somerset, I think the label stated), and was told 2/- per lb. (10 piastres).

We pay only half New Zealand prices for tobacco and cigarettes. I do not think we pay duty on anything. Milk costs 5½ piastres, and English jam 6 piastres a tin. A piastre is roughly 2½d.; 100 equals £1 0s. 7d.

We are having a quiet Christmas here. Were issued with a little extra flour and raisins for a pudding, and were given a little beer. The officers get all the whisky. We are getting a nip of rum twice a week. A relative sent me a cake, and we each received from the Wellington Branch of the N.Z. Gift Fund 4 tins of jam, 4 of milk, 4 towels, 4 handkerchiefs, 4 tins of cigarettes, and 4 tins potted meat.

Wishing you and the beekeepers of New Zealand a Merry Christmas and a Prosperous New Year,—I am, &c.,

E. GOODALL.

Southern Palestine, Dec. 28, 1917.

Address: Trooper E. Goodall, 43149, N.Z. Section Imperial Camel Corps, Abbassia, Egypt.

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(TO THE EDITOR.)

Sir,—The last issue of the Journal called for more comment re the grading of honey, and was hardly mentioned at the Field Day gathering; but the packing was well commented upon and instructive. Not being in a big way, but interested, may I suggest that instead of being so many grades that there be three kinds—namely, Forest, Semi-forest, and Field Honey, and each kind put on the market on its merits, and not be left to the will of the grader, for the simple reason is that there are as many varieties of honey as there are varieties of fruit, and if there is one thing the purchaser loves it is variety. If the bees do not know where to gather their honey from and what is the best, we had better leave it to the grader and call the bee a fraud.

Yes, Sir, I believe you are the best Bee Journal Editor in the world in not advertising the bee as the most loathsome of insects and by not making disease your chief topic in every issue like most Bee Journals.—I am, &c.,

T. STEWART.

Waiorongaomai, 22/2/18.

Answers to Correspondents.

F. B., Feilding.—We know of no short cuts to obtain the wax from old combs, &c., without the aid of a boiler and press, and you can rest assured that the money spent is well invested, as the amount of wax saved by using proper appliances would easily pay the bill. Get hold of a carbide drum for a boiler, and you can for a few shillings make a splendid press. If you do not know how, write again.

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Department of Agriculture, Industries, and Commerce.

Wellington, 11th March, 1918.

F. C. Baines, Esq.,
Secretary National Beekeepers' Assn.,
Kati Kati, Bay of Plenty.

Sir,

With reference to your letter of the 6th ultimo suggesting the payment to your

Association by this Department of the balance of the subsidy of £100 per annum for three years, which the Association has been unable to claim within the period named, I have the honour to inform you that it has been decided to extend to 31st May next the period during which the pound for pound subsidy on subscriptions collected from members of the Association is payable.

I have the honour to be, Sir,

Your obedient servant,

F. S. POPE,

Secretary.

Beekeepers' Exchange.

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

WANTED ASSISTANCE in Up-to-date Bee Farm; handy man can have employment all the year round.

C. J. CLAYTON,

Peel Forest.

The Dandy honey spoon makes a splendid wedding present.

In a multitude of councillors there is wisdom. Come to the Conference and hear.

CARNIOLANS.

The experience we had with several strains of this race over twenty years ago showed great variation in the progeny of queens as to gentleness (invariably more gentle than the blacks), swarming, and colour. Generally, we found the Carniolans more prone to swarm than either the blacks or the Italians, but with our present-day knowledge of swarm control should not bar them being given a fair trial by those who care to do so. They are not to be beaten for comb honey production, filling out the sections well, and capping them white. They are very diligent where and when nectar is to be obtained, working early and late. Their brood-nest is usually large when swarming is controlled, the queen laying well to the outer cells, making the brood combs a picture of perfection. As disease resisters they are neither better nor worse than the blacks—perhaps not so immune or resistant as the Italian race.

We found their steel grey colour did not find the same favour with queen buyers as the yellow colouring of the Italians. Why such prolific breeders have become absorbed in the blacks in those districts where introduced has always been a puzzle to me. I have not noticed a trace of them here for some years. We got them from several places in Europe and America through the late Frank Benton and others.

Mosgiel. WM. CHAS. BROWN.

ROLL OF HONOUR.

"Our hearts, our hopes are all with thee,
Our hearts, our hopes, our prayers, our tears;
Our faith triumphant o'er our fears
Are all with thee, are all with thee."
—Longfellow.

B. G. EDWARDS, late of Geraldine. Invalided home.
L. D. CARTER late of Springfield. Invalided home.
E. A. DENNIS, Gleneroy.
W. A. HAWKE, Whitecliffs.
S. R. SMITH, Woodbury. Killed in action.
R. N. GIDLEY, Christchurch.
J. SILLIFANT, Christchurch.
P. B HOLMES, Pirongia.
T. H. PEARSON, Claudelands.
R. E. HARRIS, Te Kowhai. Wounded.
J. P. IRELAND, Te Kowhai.
G. R. WILLIS. Pukekohe.
A. ECKROYD, St. Albans, Christchurch.
A. CURTIS, Porowhita.
W. G. DONALD, Brookside.
E. N. HONORE, Otakeho.
E. JEFFERY, Opotiki. Died in Egypt.
J. B. ARMSTRONG, Opotiki.
G. ROGERS, Opotiki.
C. BICKNELL, Greytown. Killed in action.
P. OTOWAY. Featherston. Killed in action.
G. NAPIER, Alfredton.
N. C. NAPIER, Alfredton.
W. J. JORDAN, Ngaruawahia.
G. SQUIRES, Fairview.
MURDO McKENZIE. Dunrobin.
W. H. BLACKIE, Ryal Bush.
JAMES IRVING, Albury.
R. M. HAMILTON, Ettrick.
A. E. CURRIE, Maungatua.
JAS. MARSHALL, Maungatua.
A. BEVAN, Waihau Downs.
D. CRAWFORD, Waikoikoi. Killed in action.
R. S. SUTHERLAND, Port Chalmers. Discharged; re-volunteered.
S. G. HERBERT, Runwai.
F. W. LUNT, Addington.
J. MORGAN, Dunnevirke.
H. SQUIRES, Hawera.
ALEX. MAITLAND, Orari. Killed in action.
A. R. BATES, Kaponga.
C. E. QUAIFE, Russell's Flat.
G. HARRISON, Waipahi.
H. W. McCALL. Wallacetown. Killed in action.
G. I. SHAW, Domett.
D. McCULLOCH, Havelock North.
E. CLARK, Westmere; invalided; severely wounded.
M. J. DOBBING, Morrinsville.

Printed and Published by Stone, Son & Co., Ltd., Dunedin, for the N.Z. Beekeepers' Association. April 1st, 1918.