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THE NATIONAL BEE-KEEPERS' ASSOCIATION OF N.Z.

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

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E. A. Earp

The New Zealand Beekeepers' Journal

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

No. 27 DUNEDIN. 3/6 Per Annum.

CONCERNING BEES.

If the man in the street was informed that there was within a mile of Pukekohe over two hundred well-equipped factories, all engaged in the production of a foodstuff in universal demand, with over ten million employees in the busy season, and all the property of one man, the chances are that he would close one eye gently and make a remark about his leg. If he was told in addition that these millions of highly skilled workers toil from daylight till dark, week days and Sundays, without asking or even thinking of wages—being content to work for nothing and find themselves—that they are never happy except when working, and when they find themselves worn out by ceaseless toil and unable any longer to do a long day's work, they go quietly away and commit suicide rather than become a burden on the community—the man in the street would wonder why the Government did not stop such shameful exploitation of labour, and why the unions did not seek to bring the workers to a more reasonable frame of mind.

Mankind has always had a sweet tooth, and before the sugar-cane was discovered the only sweet known was manufactured by bees. So from the earliest ages men have cultivated the acquaintance of bees for the same reason that so many people diligently cultivate friends—for what can be got out of them. For countless generations bees have toiled to produce honey, only to be remorselessly robbed of it by bears and men and other robber-beasts. But with extraordinary diligence the bees have gone on making and storing honey, and with still more extraordinary patience allowing it to be taken from them. And yet most people regard bees as vicious and hot-tempered insects!

The relationship of men to bees opens up a rather fine question in ethics. But I have heard it argued—very plausibly—that what the bees care about is not the honey but the opportunity of collecting it—that they are devoured with a passion for working for the sake of working. Now, men are naturally lazy, and only submit to doing hard work when they can find no easier way of gratifying their wants. If the bees find pleasure in gathering honey, and men find pleasure in eating it—what more could the bees ask?

This probably accounts for the high favour that bees have always been held as moral teachers by the very numerous class who diligently cultivate a love for industry in other people. To love work for its own sake, to despise ease and mere pleasure as heartily as the bees do and leave that to the drones—how that would simplify our labour problems. But the bees have a drastic method of dealing with drones when

they have no further use for them which might be an awkward precedent if bee-morality were adopted.

Bee-civilisation is a highly complex and scientifically-organised affair. It is the last word in efficiency. It is based on the supremacy of the female, and certainly judged by results it makes the male-created human civilisation which so far has been the outcome of several thousand years of human effort look a rather bungled job. Bees have mastered all the community problems that trouble us—but in a way that makes us wonder what will be the final outcome of the entry of women into politics. They have abolished the family, they have abolished motherhood—for the queen-bee is only a deliberately-manufactured and highly specialised egg-laying machine—they have solved the population question by regulating it to fit the means of subsistence. The bees have reduced the indispensable male to a position of helpless dependance, to be ruthlessly massacred when he is of no further use. Can any civilisation—can any standard of comfort be worth paying this price for? Let every man lay his hand on his heart and answer.

In spite of their demoralising virtues, however, bees are interesting little folk, and make charming acquaintances—I can't say friends, for bees despise men too heartily ever to be friendly. At best we are only tolerated on condition that we don't hinder them at their beloved work. If we do, they often administer a stinging reproof in a pointed way that warns us to be more careful of bee-rights. But beemen are all enthusiasts in their craft, and whenever they foregather bees and their ways seem to afford them an inexhaustible subject of conversation. I once attended a convention of beemen, some of whom had come twenty miles to be present. At seven o'clock they commenced to discuss bees, at eleven o'clock—when they adjourned for supper—they were, like a much advertised brand of liquid refreshment, still going strong. Over the coffee cups they proceeded to clear up some knotty points. They were still busily at it when I left—at two o'clock in the morning. It was like a mothers' meeting discussing babies.—"The Record," Pukekohe.

ON THE QUACKING AND PIPING IN BEES.

In "Gleanings" a short time ago I saw an interesting discussion on the above. I think the majority attributed both to the old queen, and also that the sound was produced by the wings. The following observation made by me last season on another hymenopterous fly seems to point to the probability of the latter being done by the young queens, and to it being produced from the head, and not by any movement of the wings. The fly, Mesotenus abbo pictus (some of my friends seem to object to big names, but this exactly describes it "picked out with white"), is an Ichneumon, and is rare, chiefly owing to its unusually active and solitary habit; so one day last spring I was surprised to see some forty or fifty dancing in the air, and, on closer observation, to see another dozen or so running actively up and down a dead branch of the Tagu (rubus Australis), nervously agitating their large antenae. I then noticed they were all males, so guessed I was the uninvited and fortunate guest at their nuptials. Then from a little hole

in the bark I saw a head protruded, and heard a faint "pipe," hard to describe, but best as a faint "bizz-bizz," which greatly increased their excitement. She coyly drew in her head, and then the Ichneumons continued to run up and down the branch examining other holes, till again the sound was heard, causing again increased excitement. I was able to catch several males as specimens, as they were quite oblivious to my presence, and from the branch extracted several females. These on inspection were found in cocoons, their long antennæ folded back close along their sides, and it was quite obvious the sound could not have been produced by their wings. I hope to look further into their habits this spring, but thought this note might lead to an interesting discussion on the above. Come on, Friend Jacobsen; you ought to know something about quacking!

Peel Forest. W. E. BARKER.

P.S.—Please don't think this is a futile line of investigation, or that it won't help "Critic" get that extra pound of honey he is so anxious about. Dame Nature often knows better than the average beekeeper how to raise good queens, and many a one loses her head far more unworthily than Charles I., and the deeper we enquire into the mystery of mating the better. Heaven-made matches will always be the best, with bees at anyrate. I have no sympathy with the man who thinks he is doing wisely in eliminating drones from his apiary. We often may assist Nature along certain lines which run to our advantage, and we often do not. For many years too much attention has been paid to queen-rearing alone. Our control of the drone element is at all times slight, and, therefore, by their indiscriminate slaughter we may frustrate Nature's efforts by lessening the chances of the survival of the fittest, in which apparently both "Critic" and I believe. Given full sheets of foundation and young queens, you should never have an undue number of drones. The laying of eggs is now with queens almost a minor object, she having developed along that line almost to the maximum of advantage. Quickness of flight is really of more importance, and that can only be obtained through the male. Life and success in life can only be obtained along certain lines. The bee would not turn up its nose at saccharine if he could get it from the sugar-cane, but that plant has (shall we say accidentally) as by the law of variation in nature—survival of the fittest—supplied itself with an armour of silex that breaks the teeth or ardour of any bee forager. Had the sugar cane not developed along the line of wind-blown plants, perchance its history had been different and nectaries been developed. Along this line of thought an interesting fact was mentioned at the Conference. Mr. Stewart observed bees working on bracken fern, getting nectar therefrom. Now bracken and our other fern have starch in their roots, a fact which the Maoris in their fight for life discovered. I have no doubt, given certain favourable atmospheric conditions, that this starch will have been converted into sugar, much to the bees' content, and exuded, as is often the case with trees. So after all in a way "Critic" and I can "shake," and as Bishop Meber, I apologise, but still I am going to pray and believe for a good honey crop wherever it comes from. By the bye, I am not the father of Nucleslibus or Mitasis: that's ye Editor again.—W. E. B.

Comments on Passing Bee Events.

By CRITIC.

Pages 445-6.—In whatever treatment of disease is adopted —that is, reasonable treatment—wherein there is a possibility of success, two factors in my opinion govern the situation—first, the condition of the weather at the time of treatment; and, secondly, personal equation. I am satisfied from experience that weather conditions have more to do with success or failure in dealing with disease than many are aware of; in fact, in all bee manipulations the state of the weather at the time is all-important. Then again, I think we can all agree that the personal element in every operation where more or less skill is required to bring about success, whether in beekeeping or not, plays a commanding part. It is quite a usual thing to find some succeed where others fail; it is only when a scheme fails with the majority, after tests carried out under different conditions, that we can put it down as a failure, although one here and there may succeed, as in the drug cure of disease.

Page 447.—The conditions in the Collingwood district, as described by your Collingwood correspondent must be very discouraging to those beekeepers who are trying to make a success of honey-raising. His report reminds me of the conditions generally fifteen years ago, and until there are more permanent inspectors appointed (and that won't be for a long time yet), we cannot expect the far-out districts to be frequently visited. Re sub-inspectors, what about applying for one for Collingwood and other such districts? The only difficulty I see in the matter is, that it not being desirable to appoint a resident beekeeper as inspector of his neighbours' bees, to get someone from a distance to act. Where the means of travelling is not very convenient, a suitable person might find it takes up too much of his time to give the matter the attention it should have. At all events, something should be done in the interests of beekeeping generally to put things on a better footing in the out-districts.

Page 449.—The heavy rainfall on the West Coast of the South Island is against that part of New Zealand ever becoming a beekeeper's paradise. At the same time I know that good crops of honey can be raised there in some seasons. Some of the best-flavoured I ever tasted came from a district south of the Mikonui River, about eight miles from Ross. A friend of mine, by the name of Shearer, kept bees there, and every season he used to send me some honey. It was not so attractive in appearance as clover honey, but I preferred its flavour to that of clover.

Page 450.—I can hardly believe "Thoroughwork" meant that he had 180 diseased colonies, especially when he had found the Baldridge treatment of foul-brood absolutely safe in "hundreds" of cases, and so "pure and simple" of application. Still, his statement (page 430) seems to indicate as much. Such a big number of diseased colonies would take a good while to develop; the matter requires some explanation. The changing of frames from one hive to another is always attended with great risk where there is disease about, and should never be done on any account.

Page 452.—I do not believe in the "famous long-tongued red clover strain" of bees we heard so much of some years ago. I do know that bees may be seen working in red clover occasionally, and that in some seasons more may be observed flitting about on the blossoms than in others. I also know that red clover honey is gathered in some seasons and not in others, at least so far as one paying particular attention to the matter could judge. I attribute this more to the variation in the depth of the corolla of the flowerets in different seasons than to the strain of bees. In some seasons the bees may be able to reach the nectaries with their tongues, while in others, owing perhaps to a ranker growth, the nectaries are out of their reach. When Root first advertised red clover queens, about twenty-five years ago, I imported some, but did not find them any better or worse than others I had. If Root can raise superior queens, so ought we be able. Why not?

Pages 454-5-6.—Mr. E. Phillip Turner's paper on forestry in connection with beekeeping is, I consider, a very sensible illustration of the subject. He very properly explains that afforestation has "little to do with beekeeping beyond the provision of timber for packing-cases for honey and for hives." This supports my comments on Mr. Cockayne's paper (page 427), or that part of it referring to forestry.

Page 443.—Referring to my comment last month on "Thoroughwork's" opinion of honey from Eucalyptus melliodora (yellow box), I have before me a paper read at the last Conference of the Victorian Apiarists' Association, held in Melbourne on July 25th and following days, in which the merits of honey from the different Eucalypts is touched upon. That from yellow box is given a very high place, and this corresponds with the position assigned it by Mr. Tarlton-Rayment in his book. Possibly "Thoroughwork" was mistaken as to the source of the honey he tasted.

Some time ago, when the reservation of beekeeping sites on land being cut up by the Government for closer settlement was proposed, I suggested through the press that some regulations would be needed to compel applicants for such sites to fully stock them with bees within a certain time or forfeit the site or sites. The decision as to the minimum number of colonies any such site is capable of profitably carrying would have to be left to the apiary inspector for the district. In the absence of such regulation, a person might lease or claim a beekeeping site and set down a half-dozen hives of bees to keep within the law, and so deprive a commercial beekeeper of the site.

I find that the very evil I pointed out as possible has cropped up in Australia. In the report of the Conference mentioned above, it says:—"In the past a man could pay 1/- or 2/6 and prevent anyone coming within two or three miles of him. He kept beekeepers off, and did not keep sufficient bees to be of any use to himself." This is now to be altered, and I merely call the attention of our National Association to the matter, so that an eye can be kept on the regulations here.

The printer wants some money. Has your name appeared in the list of subscriptions paid? Stamps or postal notes to the value of 3/6 will be appreciated by the management.

Honey Crop Prospects.

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

Auckland.—Reports so far indicate that the bees have wintered well, and as we have had exceptionally wet weather during July and August, the prospects for a good spring are unusually bright. About thirty-six tons of honey have been graded at Auckland this season.—G. V. Westbrooke. 2/9/16.

Wellington.—There is every indication of a favourable spring. The bees in my district, as far as can be ascertained, have wintered well. The present weather conditions have enabled the bes to get a cleansing flight, and, if continued, will have very beneficial results. There is nothing new to report.—F. A. Jacobsen. 4/9/16.

Christchurch.—There is very little honey offering; most beekeepers are quite sold out. In the Nelson Province there is a little fresh nectar being gathered, and stocks are gathering strength. Several varieties of nectar-producing flora are in bloom—gums, willows, and native fuchsia being the principal. I found in a very sheltered place white clover in bloom on the 15th inst.—L. Bowman. 31/8/16.

Dunedin.—The market conditions are unaltered. A few small lines have come forward, and have sold readily. Bulk honey is quoted at 5¾d. to 6d. Sections: None offering. Beeswax is scarce, and is quoted at 1/4 to 1/6.—E. A. Earp. 4/9/16.

CANTERBURY BEEKEEPERS' ASSOCIATION.

A special meeting of the Canterbury Beekeepers' Association was held in the Trades Hall on August 1st, Mr. C. A. Jacobsen (President) in the chair. The chief business of the evening was to decide whether this Association would join the National Association under the amended constitution as adopted at the last Conference. Finally it was unanimously agreed to fall into line. The Canterbury Beekeepers' Association, which was inaugurated in 1907, and which has done a very large share of the pioneering work in the organising of the beekeeping industry, will in future be known as The National Beekeepers' Association of New Zealand, Canterbury Branch. It was resolved that any members on active service should be kept financial on the books as a mark of appreciation, and the Secretary was instructed to notify them of the decision. One member has been invalided home after serving from the commencement of the war; one is on active service; one is training, and a fourth has enlisted.

The Secretary was instructed to write to the Department of Public Health pointing out that no reply had been received to a previous letter, in which attention had been drawn to the fact that honey was being sold unlabelled, and saying that there was reason to believe that it was still being done.

The President then gave an address, in which he reviewed the work which had been done by the Association, and pointed

out the advantages to be secured by organisation. He urged members to work to increase the membership of the Association, and so strengthen the hands of the National Association. He announced that he intended to give an address at each meeting in future, and would make his remarks of an instructive nature. By this means he hoped that beginners in beekeeping would be attracted to the meetings, and receive instruction which would be invaluable to them.

It was resolved that in future a learners' class should meet half an hour before the general meeting, and Miss M. Shepperd promised to preside. Experienced beekeepers are also invited to attend and give the benefit of their experience.

A Beekeepers' Journal has been in existence two years, and anyone contemplating entering into beekeeping is strongly advised to subscribe. Information can be supplied by any member of the Association.

E. G. WARD.

FLAT v. GABLE ROOFS.

(By A. L. LUKE, Awakeri, Auckland.)

For the sake of the beginners, I think more ought to be said in favour of the flat top covers instead of the abominable wooden gable end covers which are pushed on the market by some manufacturers of bee supplies, &c. No doubt I am now jumping on some of the older beekeepers' corns, but nevertheless facts speak for themselves.

Quite recently when looking around the country, I called on a large manufacturing plant of bee supplies, and I passed the remark, "How is it you still stick to the gable end covers?" The reply was, "We have always turned out this style, which is very satisfactory." "But surely," I remarked, "don't you have any complaints of them blowing off or the dampness going through?" I was assured that the complaints were nil.

Yet a few weeks later I visited a number of commercial apiaries which had these said gable end covers in use, and almost the first thing they would say was, "Do your covers ever blow off?" At one apiary they were telling me when they got up one morning very nearly all the covers were blown off, and so they had to wire them all down. The wire was tightly fixed around cover hive and bottom-board, and this apiary was in a somewhat sheltered corner. I also visited the apiary on the Dillworth Estate, near Auckland, where a model apiary has been started with all modern appliances and conveniences, and also there the gable end covers are in use. The manageress informed me that quite recently all the covers were blown off and made a muddle of the whole apiary. In the colder districts, like the Rangitikei, I have seen the frost freeze right through these five-eighth gable end covers, and the result is wet mats and mildewed frames, and the bees wintering very badly. Early last spring I purchased two dozen gable end covers covered with a very thin zinc. Certainly the frost wouldn't go through these; but lo! what a mess one windy day last October. Some of these covers were blown half a chain away. I still have these; but no more!

I have heard it said that there is no ventilation with the

flat top covers. This is not so if made properly. The covers I adopt are ¾-inch of the frames, and they can be easily made more or less if required, and with a ventilation hole in each side. They are formed out of 6 x 1 t. & g. flooring doubled so as to stop any possible chance of twisting, with a 3 x ¾ batten nailed securely all around, with a ¾-inch thick block fixed in each corner so as to keep the necessary height off the frames, and the top covered with No. 28 gauge flat iron. This makes a practically everlasting job, with no leakage. They are frost-proof and also wind-proof, for these covers are twice the weight of the gable end ones, and besides they are very useful when manipulating hives in the season by laying them on the ground and stacking supers on same. They also make a handy seat. I fancy I can hear someone say, What about the heat in the summer? I very carefully tested three covers one very hot day last January by taking three hives out in the open with frames in all ready for the bees. I laid a thermometer on top of the frames of each hive, and put the covers on—one being the gable end, one flat top covered with flat iron, and one flat top covered with malthoid roofing, and on looking two hours later to see what the thermometer had to say, it was surprising to find that there wasn't half a degree of difference in the three hives. Remember, these flat covers are two inches thick, with ventilation holes in the sides.

At present I am busy making 200 flat covers for the coming season. I don't mean that my flat covers are the only good covers in use, for I have seen other designs equally as good; but I do say they are a long way ahead of the gable end ones, and if the beginners only knew the difference, I am sure they would adopt the flat covers.

Correspondence.

(TO THE EDITOR.)

Sir,—No doubt your columns are open for questions from beekeepers of the amateur class, of which I am one, so venture to ask a question or two.

Page 402.—"Eighty thousand colonies of bees in New Zealand." Is this correct? If they yielded only 28 lb. honey each (a low average), this would mean 1,000 tons.

Page 423.—"The ordinary method of fumigating combs with sulphur is safest." What is the ordinary method?

Thanking you in anticipation of answers to above through your columns,—I am, etc.,

D. C.

[The average does appear low, but there is every reason to believe that the production of honey in New Zealand is considerably over 1,000 tons per annum in good seasons. The ordinary sulphur method is to put two or three storeys, one on top of the other, on a flat board. Place within the storeys an iron vessel, the bottom of which should be full of live coals or coke. Sprinkle a large handful of sulphur on the fire, and quickly stack the combs to be treated on the supers. Leave

the combs over the sulphur flames for twenty-four hours. The object of the three supers at the bottom is to prevent the possibility of the heat from the burning sulphur destroying the combs.—Ed.]

(TO THE EDITOR.)

Sir,—No, I will not believe anyone can rear healthy brood from combs previously infected with foul-brood; once infected always infected, else why do we keep wax from diseased colonies at boiling point for twenty minutes, scorch hive bodies and bottom-boards? Is there no need for all this trouble? Too true, there is. If that is the cure Mr. Cotterell used, I do not believe he had foul-brood. It is my opinion that it was black-brood, and, strange to say, he has used one of the recognised cures for black-brood—namely, by caging the queen. Black-brood is easily cured, and easily mistaken for foul-brood, being similar in all respects, except that it is of a watery and not ropy substance.—I am, &c.,

H. BENTON.

Newstead, Featherston, August 8th.

(TO THE EDITOR.)

Dear Sir,—At the Conference Mr. E. P. Turner, of the Forestry Department, mentioned that bees collected propolis or wax from the Panax. I did not at the time think it courteous to point out this mistake, and that what they collect from the ripening seeds of the Panax is truly nectar. I am standing under a Panax tree (P. simplex) whilst writing this, which is humming with bees, and is producing nectar so profusely that it is dropping on to the leaves. I have never seen it produced quite so freely. The mako-makos are also busy at work on it. It is sweet to the taste. In the autumn I have noticed these same capsules still exude a thickened syrup that has a turpentine taste, which the bees collect, and which I think Mr. Turner mistook for wax or propolis. This nectar is coming from the capsules, and not from the leaves or any aphide. You get a shower-bath if you shake the tree, an experience I have just got in gathering a specimen. On the male form of the Panax, a tree of which is growing not far off, the bees are busy collecting pollen; it, too, is producing nectar from its aborted ovaries, but not so profusely. The inference is obvious: that bees, after collecting pollen from the male plant, pass on to the female that is producing nectar so profusely, thus pollinating some. I send along specimens.—I am, &c.,

Peel Forest, August 20th. W. E. BARKER.

TREATMENT OF FOUL-BROOD.

(TO THE EDITOR.)

Sir,—In your last issue C. J .Clayton and J. C. Hobbs deal with the Clayton treatment, and incidentally with myself. Both writers, apparently, still have confidence in medicated syrup, when the complete failure of medication before the "wax building" cure was introduced has absolutely condemned it. Mr. Hobbs uses 1 of carbolic acid in 700 of syrup, and

states that this when taken up by the bees will sterilise the infected honey in their sacs. But 1 in 700 would not sterilise the syrup itself. It takes about 1 per cent. to destroy most microzymes, and I think it has been conclusively shown that a strength sufficient to be germicidal would be "beecidal." Mr. Clayton states that in using his treatment I got into a mess. I did! I treated about fifty colonies, and about three-fifths of them remained slightly affected. All the same, I did not put an extractor comb in the hive while treating these. I used it on about half a dozen others afterwards, just to see what honey they did taken down. Some I did in the evening, and took out the comb first thing in the morning, and there was no doubt about the honey being there. Would it be possible that Mr. Clayton's test colony smothered, not starved? I think the whole matter resolves itself into this: that when conditions are favourable, one shaking on full sheets of foundation is sufficient. Indeed, the Editor of "Gleanings" states that he has yet to be convinced that two shakings are necessary. And favourable conditions are those under which bees build wax freely. This condition, perhaps, could be brought about by ample feeding, but in times of scarcity the bees seem to be very provident, and build comb sparingly, storing the surplus in the first few cells. With a good flow on wax secretion goes on abundantly, and probably only fresh honey being brought in is stored. For this reason also stronger colonies treat better than weak ones.

While I still contend that carbolic cloths will not drive the bees down without taking honey with them, I like the method, because it does not scatter the bees so much. Mr. Hobbs probably failed because he says he did it during a cool spell. Heat is required to volatilise the carbolic acid.—I am, &c.,

APIARIUS.

(TO THE EDITOR.)

Sir,—There is no doubt that we beekeepers of New Zealand can congratulate ourselves on our Journal and the Editor thereof who manages to secure for us so many excellent articles on all subjects connected with the industry; and as he has asked for suggestions to make the Journal more popular to increase the number of subscribers, I offer the following:—

I think we are making a mistake in practically ignoring the beginner. Take the current number: what is there for the amateur and small beekeepers? The craft teems with problems that tax the knowledge and skill of experienced men, and, as we all know when starting with bees, the hive and its inmates are an absolute mystery. I am sure it would be a step in the right direction to have a beginner's department, where the novice can gain knowledge on the many points that bewilder him. In the Department of Agriculture's Journal there has been an excellent idea carried out in the "Dictionary of Farming" for students, and if we had a "Dictionary of Beekeeping" for beginners in our Journal, it would make it attractive to a class of men whom we don't cater for. I would start right at the beginning with questions and answers attached, similar to this:—

What is a bee?
What is the part played by the bees in relation to agriculture and horticulture?
How do bees live?
What is a queen bee? And so on.

Then I would have the work of the current month set forth, with warnings to look out for diseases, food, &c., &c.

There are many excellent beekeepers who could run this department splendidly, and as the season will be starting next month (September), I hope you will get it going.

I tried to get a beekeeper to subscribe to our Journal after showing him one or two copies, but he said he could get more information suitable for a beginner out of the Journal of Agriculture, which he subscribed to. This should not be when we have a Journal of our own.

Another suggestion I make, Mr. Editor, is that we have less anonymity in our articles. I do like to know who the writer is. I would except "Critic" for obvious reasons; but "Veritas," "Citizen," "Apiarius," "Rusticus," and all other "cusses" I would suggest they sign their name. This month there is a "To Wit," next month a reply will be signed "To Whoo," and then I shall (h) owl!

Whilst I am writing, I should be glad if shareholders in the H.P.A. will kindly note I resigned the secretaryship of the Company last May. Therefore, all correspondence should be addressed to the Company at Hawera.—I am, &c.,

FRED. C. BAINES.

Kati-Kati, Bay of Plenty, August 30th.

(TO THE EDITOR.)

Sir,—I am somewhat interested in Mr. Clayton's foul-brood cure, and I have a few words to say on the matter; also about the "soup," "mess," etc., that he seems to think "Apiarist" and a few others have fallen into. I have my opinion as to who have "souped" and "messed" themselves, but I will not say who for worlds. I think "Apiarist" is quite right. I cannot for the life of me see why the bees cannot carry down honey. He said he confined bees in an empty hive, and in two days they were dead. How are we to know that they died for want of honey? Bees die in many ways. Some people may be cruel enough to say they died of suffocation, for there is little or no ventilation through perforated zinc, especially when the bees are confined and are in front of the zinc trying to get out. When Mr. Clayton proves that the bees do not carry down diseased honey (he has not so far), we will one and all vote him thanks, but not before. I would advise Mr. Clayton not to recommend any of these short-cut methods to us beginners; some are apt to make too much of it. The two-shake plan has stood the severe test of time, and has come out with colours flying, so we leave these short-cut plans to experts. In the meantime let us get busy and clean some or all of it out of our apiaries. Also, let the new inspectors get busy and wriggle around to some of these diseased apiaries. There is a good—or, I mean, a bad—few in this district. Here you can smell the microbes as they buzz about in the air; they hang there as thick as cream on a cold day.

As fast as you treat colonies here, they catch it again from your neighbour's bees. I treated all my few twice last summer. They were done the autumn before, and as soon as sent out of the district there was no more trouble. No, it was not bad management in treating. Talk about the "joke of the West Coast"; our joke inspection beats it hollow, or, rather, it would be if it was not so serious. Our foul-brood law has been in force a long time, and no improvement yet, at least not here.

I say, Mr. Editor, I have a few lines to chew with you. You say "paint your hives," or at least I think you do, and so do most fellows; even the journals do not mention much else. I have an idea; it may be old. How would it do to give hives, covers, bottom-boards, &c., a good coat of hot Stockholm tar (not coal tar), and then giving all a coat of good quality whitewash. I know a few ways of making whitewash that will stand all weathers. Of course, it would only colour, but then that is all it needs to do; the tar protects the wood almost indefinitely if well put on. Now, I don't care seven pins if the tar does show through, so long as it is light enough in colour for coolness. Of course, you are right as far as you go. Paint is nice-looking, clean, and smells nice for the bees, but so does Stockholm tar, altogether different from coal tar; it has a decidedly sweet smell. Do you know anyone who has tried it? I have not yet had a chance, but I intend to try it. What is your opinion?

Now, another bone. What kind of wood do you think best suited for the manufacture of frames? White pine splits beautifully when nailing, and is lovely for twisting at times.

Have a bite at this, please. Do you know any good joints to make when making frames (unspaced), and the best dimensions of the end, top, and bottom bars? They must be very simple to make. I object to factory made joints; they are not straightforward enough.

Does stimulative feeding pay? I disagree with you if you say it does.—I am, &c.,

W. BROWN, Junr.

Cheviot, September 5.

[We do not know whether your plant of a substitute for paint has been tried. It seems good, and is certainly worth a trial. White pine is not the ideal timber for frames; still it is cheap, and that counts some. Just before war broke out negotiations were opened up for the supply of a pure white Manchurian pine similar to the American basswood, but the arrangements were not completed owing to the shortage of boats from the East. There are no better joints for frames than the ordinary square checks, such as are used by manufacturers all over the world. The best dimensions for frames are the standard ones, although some beekeepers prefer slight variations. Stimulative feeding does pay—it has stood the test of time.—Ed.]

WANTED, a Regular Contributor of Articles on the month's work, more particularly in the form of instructions to beginners. If necessary, the writer can say, "Don't do as I do, but do as I tell you."

Good Things from Everywhere.

A case of more than ordinary interest to commercial beekeepers is to be heard during the latter end of this month, when an apiary instructor is proceeding against a well-known beekeeper for obstructing him in the execution of his duty.

A Temuka correspondent writes:—"The bees are having a good time on weeping willows, cherry plums and peaches. Next month the ordinary willows will start. The weather is good; if it will continue while willows are in bloom a good start for the season is assured."

Beekeepers will be interested to know that a fellow craftsman, Mr. Peter McKay, has invented an artificial arm for the use of those who have had the misfortune to lose a limb. The invention, which has been patented in the principal countries of the world, is declared by the chief military and medical experts to be the most useful and ingenious contrivance yet devised. The Press also are unanimous in their praise of the invention. Mr .McKay had the honour of exhibiting his invention to the Hon. the Minister of Defence, together with his military advisors, and when a report of the invention was placed before Cabinet, Mr. McKay was granted a bonus to enable him to proceed to England to bring his invention under the notice of the Imperial authorities. We wish Mr. McKay all the success which his invention deserves.

In June, 1909, Mr. J. S. Cotterell tried to find out the component parts of propolis. As a result of his enquiry the following note was published in "The Chemist and Druggist," September 18th, 1909:—

"Propolis is a peculiar resinous body with which the honey bee cements and coats the inner surface of the honeycomb cells, and which has enjoyed from antiquity a popular reputation as a vulnerary. It forms a dark-yellowish or brownish plastic mass, and is supposed to be derived from the buds of poplars, birches, and similar trees. This substance was chemically examined a few year ago by Dr. M. Greshoff, of Haarlem, and more recently by Dr. P. Bohrisch ('Pharm. Centralh.,' xlviii., 1907, 45, 929). The last named chemist found it to consist of 43.6 per cent. of propolis resin, 8.7 per cent. of propolis balsam, 27.9 per cent. of beeswax, 6.9 per cent. of essential oil, and 12.9 per cent. of insoluble impurities. The occurrence of resins in the contents of the beehive is a subject of some interest, and I hope some of your correspondents having a practical acquaintance with bee-keeping will be able to throw more light upon it. During the course of an investigation into the origin of 'pwenyet,' the black wax of Burma, formed by species of 'Meliponæ' and 'Trigonæ' (Hymenoptera), I have recently shown that the substance is the resin of 'Dipterocarpus' or 'Hopea' trees transferred bodily from the wounded trees to the nest of the insects. In other parts of the world other trees afford material for manufacturing the nests of the 'Trigonæ.' In Trinidad the latex of the rubber-trees is used, and in Malaya the gum-resin of the wild gamboge-tree is taken. It would be interesting to obtain observations on the particular resins em-

ployed by the honey-bees of Europe in forming propolis. Any information on this point should be followed up by chemical analysis in order to discover if the resin is transferred to the hives in an unaltered condition, or whether it has become changed by a process of metabolism."—David Hooper (Weston-super-Mare.)

BEEKEEPER'S DREAM.

'Twas just a dream!
While wandering far away,
So tired of all the strife for what was needful,
And useless meetings, bringing forth no fruit.
I seemed to see that such things were not meant to be.

Life's problems oft had caused me stay and ponder o'er:
'Twas never meant that we,
The creatures of God's image, should not be above the birds and flowers,
Not knowing how to pay our way.

And then light dawned!
From yonder isle afar away,
Mere speck upon the ocean roll,
A glimpse I caught of heavenly thought,
Of what might be somewhere, some day.

It seemed in that fair land
There dwelt a world of insect life,
So wondrous and so beautiful;
I gazed entranced. Could I but live upon it for a while.

'Twas God's own land, of milk and honey pure,
Of birds, and bees, and flowers and wondrous music;
And as I gazed a voice entreatingly called forth,
"Come o'er and take control, and make it yield its substance
For sweetening life the wide world o'er.
And then we learned the secret of the universe,
And furnished tiny homes in great abundance,
Peopling them with insect life,
And bade them live and multiply.

And thus we sowed in countless number,
And left the harvest to a Higher Power,
Who smiled upon our labours,
Granting to those who sowed so faithfully
Should reap reward.

Then as the seasons came around,
Such music rose upon the air
Which made all beemen smile,
For every little home was filled to overflowing.
And the more we sowed the vaster was the yield,
Until a fleet came flitting o'er the sky like great white winged doves,
And steamers manifold were brought,
That o'er this troubled world of ours the sweetness might be carried,
While every corner of the earth with honey be supplied
From out this isle, where righteousness doth dwell.

The vastness of New Zealand's store is yet untouched,
And wealth in great abundance lurks around for those who
courage hold,
And greater things prepare
In bee and flower and tree.

'Twas just a dream!
But who dare say it will not be?

—M. SHEPPERD, Christchurch.

STINGS v. RHEUMATISM.

Among the exhibits in the Dairy Show at the Agricultural Hall in London is one of interest to pharmacists. It has been named the "Bee Vaccinator," although its object is not to vaccinate bees, but rather to assist the bees to sting those of us who have the misfortune to suffer from rheumatism. It has long been known that beekeepers are remarkably free from rheumatism, and bee-stings have been used for many years as a remedy for that complaint. There has, however, hitherto been a difficulty in applying the remedy, for the bee is endowed with a judicial mind, and in its absolute impartiality it stings the doctor as readily as his patient. As it is not consistent with medical etiquette in this country that the medical man should share his remedies with his patients, the use of bee-stings from the antirheumatic point of view has not spread very rapidly. To surmount this obstacle is the object of the invention to which we are referring. The appliance consists of a glass cylinder somewhat resembling the upper half of a syringe, which it also resembles in being provided with a piston. The method of using the apparatus will be readily understood from the illustration. On the top of a hive, in this instance an observatory hive, is an opening provided with a slide of perforated zinc. The "vaccinator" (made by Messrs. J. Lee & Son, Ltd., Martineau road, Highbury, London, N.) is placed upon the slide, which is then withdrawn, and the bees, enticed if necessary with a little honey, run up into the glass cylinder. The slide of the instrument is then closed, and the bees are thus confined until required for use. The "vaccinator" is placed upon the spot where the stings are to be applied, the slide is withdrawn, and the piston pressed upon the bees, who resent this treatment in the usual manner. In estimating the effect of each sting it should be remembered that the bee's sting is barbed, and usually remains in the wound. To it is attached the poison-sac, and this is provided with automatic muscles, which continue to pump the poison into the wound for one or two minutes. If, therefore, the sting be removed at once the quantity of poison injected will be but a small fraction of the whole quantity contained in the poison-sac. It is advisable to choose for inoculation some part of the body where the skin is loose and the underlying tissues not too hard. A sting in spots such as the cartilage of the nose or ear, where swelling does not readily take place, may be extremely painful. The first few stings are more painful than subsequent ones, and in a few days most patients become immune. In order to diminish the inconvenience of the first stings local anæsthesia may be resorted to. Dr. Terc, of Marburg, published an

interesting account of his thirty years' experience of the cure of rheumatism by bee-stings in the "British Bee Journal" of March 11th, 1909, and in the same Journal in December of last year were published a number of observations on the same subject. Favourable reports on the treatment have also appeared in the "British Medical Journal."

SUBSCRIPTIONS.

The following subscriptions have been received during the month:—

Messrs. A. E. Andrews, J. C. Allison, A. Belneaves, W. Brown, Junr., W. Browne, J. S. Bates, J. Crist, Dilworth Ulster Institute, A. H. Davis, H. W. Earp, G. T. Gulde, P. James, H. D. Mills, J. A. Moore, J. Mullions, M. P. Millett, C. A. Pope, Mrs. J. D. Press, J. Rombach, R. Rose, A. Speak, H. Shepherd, J. H. Talbot, J. Walton, Wm. Watt.

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