

SEVENTH

Ed. 1920

ANNUAL CONFERENCE

of

The National Beekeepers'
Association of New Zealand.



Held in the Concert Hall Y.M.C.A., Christchurch,
June 9th, 10th and 11th, 1920.



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FIRST DAY—WEDNESDAY, 9th JUNE.

The Seventh Annual Conference of the National Beekeepers' Association of New Zealand opened in the Concert Hall of the Y.M.C.A., Christchurch, at 10 a.m. on Wednesday, June 9th. There were 90 delegates present, and the President (Mr. James Allan) presided. Amongst those present were:—Mr. J. A. Campbell (Assistant Director Horticulture & Apiaries Division, Department of Agriculture), Messrs. E. A. Earp, F. A. Jacobsen, G. V. Westbrooke, H. A. Young (Apiary Instruc-

tors), Mr. J. Rentoul (Chairman) and Mr. C. F. Ryland (General Manager of the N.Z. Co-op. Honey Producers' Association Ltd.); Messrs. J. Cooper, A. J. May, J. Shackey, W. A. Lilburne, A. Norton, W. H. Brown, E. W. Sage, G. L. Hight, A. H. Skey, W. Kennedy, P. Martin, A. J. Boyce, W. E. Barker, S. Gardiner, R. McGibbon, C. A. Jacobsen, T. A. Clark, C. A. Pope, Woods, E. Chavè, A. A. Downs, L. Bowman, J. Kreft, A. Ireland, H. J. Ellis, W. H. Cartwright, A. H. Davies, L. Irwin, H. Gardner, J. Westroff, C. J. Clayton, A. H. Emerson, E. G. Ward, W. B. Bray, J.

Murdoch, J. Bayne, A. Barrett, G. H. McLean, W. Booth, R. Beattie, E. Simpson, L. G. Kitchingham, T. S. Winter, H. N. Goodman, W. Watts, W. Watson, T. Barr, A. G. Craig, J. C. Gibb, A. R. Dickie, A. Robins, H. Shepherd, R. McKnight, J. Forster, F. J. Kerr, L. Irvine, G. J. Verrall, R. W. Brickell, N. Askin; Mesdames Emerson, Shepherd, Palmer, Cartwright, May, Chamberlain, Aitcheson, Kitchingham, Robins, Ward, Jacobsen, Beattie; Misses M. Shepherd, Buckley, Hart, Winton, J. Mackay.

An apology for absence was received from Mr. G. Witty, M.P. for Riccarton.

The President called upon Mr. J. A. Campbell, Assistant Director of the Horticultural Division of the Department of Agriculture, in the absence of the Mayor of Christchurch (Dr. H. T. J. Thacker, M.P.), to open the Conference.

Mr. Campbell apologised for the absence of Mr. T. W. Kirk, the Director of the Horticultural Division, who was not well enough to be present. The ladies and gentlemen before him, Mr. Campbell said, represented one of the Dominion's important rural industries. It was a young and growing one, and growing in importance year by year. Like all young industries, it had many problems to face. They had met to consider those problems and reforms, and he hoped that the conference would be able to formulate and tabulate in detail those pressing questions they had been talking about prior to the Conference. The Department generally was anxious to assist such industries as beekeeping; but those engaged in the industry were called upon to assist themselves. The Department, he felt sure, would assist in all reasonable proposals put forward. The Conference should formulate its proposals in such a way that the Department would be able to understand what was wanted. Having formulated their wants, they should push them with all their power.

PRESIDENT'S ADDRESS.

The President said that the present was the first Conference that the Association had held in Christchurch, and consequently there were present many who had not attended previous Conferences, and consequently he gave full liberty to delegates to shake hands with any man in the room on the shortest notice. He did not know if he could take the same liberty in respect of the lady members; but it was the duty of every gentleman to make the ladies feel

at home. In his address he wanted to take up a subject that struck at the root of the beekeeping industry: he desired to speak of what he considered should be the keynote of the work of the Conference. At the previous meeting, held in Wellington, the Executive resolved on a forward movement in connection with the industry. Continuing, Mr. Allan said:—At our last meeting, held at Wellington, your Executive resolved, after a good deal of consideration, on a forward movement in connection with our industry. To that end it sees to the several Branches of the National Remits for their consideration bearing on the direction which in their opinion this forward movement should take. Most of you will have had an opportunity of considering these remits, and I hope that when they are discussed in Conference that you may speak with no uncertain sound. May I at this time let me outline the position that is behind these remits. Let me ask the question—What at the present time is the greatest hindrance to the progress of our industry throughout the Dominion? Is it not Foul-brood? Do we not all realise that this one disease more than any other trouble—or all our other troubles put together—is our greatest difficulty? It occasions more loss of time or loss of money than anything else. It is our constant dread. We never open a brood-nest without a watchfulness which becomes second nature for the flat and perforated cell, and too often—far oftener than is necessary—we find it. In our industry there are two kinds of people—there are keepers of bees and beekeepers. The first of these sow the disease; the others reap the harvest. The keeper of bees is one who owns bees; he has more or less colonies, generally less stuck in some out-of-the-way corner. He does not know anything about foul-brood, and when his bees die, which they generally do, it is quite unexpected; in fact, he will probably remark that a few days before his discovery they were unusually busy, which is very likely. The beekeeper is also one who owns bees. He has more or less colonies—generally more—and they occupy the pride of position, well sheltered and tidily kept. He may not know much about some things, but he does know foul-brood. His bees never die, but when they have been out visiting he sometimes has “McEvoy.” It is my candid opinion that if the keeper of bees will not become a beekeeper, then he ought not to keep bees. We have an Apiaries Act. Mr. Hopkins, who fathered that Act, is proud of it. Speaking generally, the beekeeping fraternity is proud of it. Other countries, notably some of the North American

States—have admired it, and wished that they had a similar Act. But of late years they have become coldly critical. "Yes," they say, "you have got the ideal Apiaries, but you are not diminishing your foul-brood; you are not cleaning up; disease is still rampant all over your Dominion. What good is it?" The fault is not in the Act. Mr. Hopkins himself has only one fault to find in it. He says increase the penalty from £5 to £20. I do not know about that, but this I do know—the fault is not, as I have said, in the Act. We as beekeepers have not had the courage to have the proper administration of the Act. That is where the fault lies. Do not misunderstand me; I am finding no fault with the Department as it at present exists. My complaint is that it is totally inadequate to carry out the Act which it is supposed to administer. An instructor may succeed by giving his attention to a comparatively small area in cleaning it up; but is it a fair thing to expect that our instructors will make a success on the areas they at present control? Let me make a statement that will bring this out clearly. As most of you know, my Apiary is in Southland, and I spend my summers there. This last season it was my privilege as your President to attend a branch meeting in that district, and at that meeting I met Mr. Earp. I was struck by this, though I did not say so then, that Mr. Earp was amongst friends. He had done work for them which they appreciated. It was the kind of spirit that one naturally wants to see exist between the beekeepers and instructors. Now, I met Mr. Earp again, still in his district, but this time at Tasman, in Nelson. That was only a few weeks ago. How far do you think it is between those two places? Only a matter of about 700 miles! Is it a reasonable proposition to expect Mr. Earp to clean up foul-brood over an area like that, and at the same time grade about 15,000 tins of honey at the various ports? In my opinion it would require six well qualified men to clean up the South Island alone. To divide it into six districts would still leave them very large, and there would still be an urgent need for local inspectors to help in the work. I am not quite so well acquainted with the North Island, but it gets more than the South in most things, so probably its needs would be greater here also. I do not, however, propose to indicate how many instructors it would take; rather I wish only to show the total inadequacy of the present staff. They have done yeoman service for our industry—all honour to them for what has been accomplished—but they simply cannot

do this thing; there is not power enough. What, then, should be done? We should ask that a promise already made in answer to a resolution carried at a former meeting of this Conference should be carried out—that a Chief Apiarist should be appointed: a man with a thorough technical knowledge of beekeeping; a man who knows foul-brood; a man with brains and push. Let him make his own plans, but let us have this trouble dealt with in a fair and business-like way. I daresay our legislators will ask the question: Is this industry worth all the expenditure involved in such an increase in instructors as would surely come? Are they justified in putting this additional burden on the taxpayer? When the war was in progress our Government sent every available man to the front—everything had to give way to war needs—and consequently all the services of the country were more or less crippled. When the war ended it left us with a great burden of debt. What, then, became the cry? Simply this, we must produce to our utmost limit. We must increase our exports, and as a consequence the inflow of money into the country. Every man must do his bit. Well, we beekeepers want to do our bit. This disease is a drag on us, but still with it all our own Co-operative Association received in the last season 624 tons of honey, of a value of about £40,000. The record is one of continuous and rapid increase, and, given a proper chance of development, there is no reason why in a few years it should not be 6,000 tons instead of 600 tons. Then as a product ours is second to none. There is a verse in one of the old Prophets which says: "Butter and honey shall he eat until he shall know to refuse evil and choose the good." Twenty-five centuries ago our product was bracketed with butter in this wonderful way. If today we are behind in the race, we only plead for a chance. I am content to justify my position by two reasons:—(1) That our industry is worth it; (2) That it is the proper thing to do. If anthrax or swine fever or any other dreaded disease was to appear in Southland or Auckland, or anywhere within the three-mile limit, Dr. Reakes would be after it, and no matter what it cost or how many inspectors were required, it would be stamped out. During this last season "fireblight" appeared in some orchards in Auckland. The Horticultural Department have got a whole army of instructors after it. There is no thought of the expense, simply the danger flag has been hoisted, and will not be pulled down until the danger has passed away. Ladies and gentlemen, I want the danger flag

hoisted in so far as our industry is concerned, and kept hoisted until the danger of foul-brood is under control throughout our Dominion. I make this assertion, and I feel sure that beekeepers of standing will bear me out, that the loss in production of honey through foul-brood is ten times greater to our Dominion than the total cost of the Apiaries Department. It is a brake on the wheels of our industry that is not only cutting down the production for most beekeepers, but is hindering expansion. Owing to lectures given to our soldiers in the camps in England, many of them have come home wishing to become beekeepers. And it would give present beekeepers the greatest pleasure to welcome them into our ranks; but we dare not do it: to become a beekeeper while ignorant of foul-brood is to court disaster. If we had a strong Department with sufficient instructors much could be done to help these men to take up an employment that in many ways would be peculiarly suitable for them.

It is my hope that this Conference may discuss this subject thoroughly, and that permanent good to our industry may result.

MINUTES CONFIRMED.

On the motion of Mr. E. G. Ward, seconded by Mr. J. Ellis, the minutes of the previous Conference were taken as read.

SECRETARY'S REPORT.

The Secretary (Mr. Fred C. Baines) submitted the following report and balance sheet:—

Mr. President, Ladies & Gentlemen,—

I have very great pleasure in again presenting my annual report and balance sheet which, I think, will be satisfactory to you all, as it shows the condition of the National to be in a very healthy state, and the finances sound.

The members' subscriptions have increased £9 10s. and the Branch Associations by £8 14s. 10d. This latter would have been increased considerably, had I had the returns from three Branches whose statements have not yet come to hand.

During the year another Branch has been added from Hawke's Bay, and we are promised another in Auckland as soon as the season commences.

The badges of membership have been procured, and can now be obtained from the Branch Secretaries or myself.

The Journal Account, too, is satisfactory, although I am not able to show a very big profit this year, which has been brought about by two reasons. The first is that, as I was anxious to increase the subscribers, by the courtesy of Mr. T. W. Kirk I was loaned a copy of the lists of registered beekeepers, which contained over 5,000 names, and to all those who were not already subscribers I sent a specimen copy of the Journal. I am sorry to say the result was not so good as anticipated, as out of that large number I secured only 175 new subscribers. The job entailed a pretty heavy printing and postage bill, and incidentally a fair amount of work on my part, and I confess the result was disappointing, although I have learned since that another periodical that caters for a kindred industry made a similar canvass of a roll of 8,000 names, and secured only 250 new subscribers; so we really did better than they did.

The actual number of copies sent in this month was 839, of which there is a free list of about 35, so the number of subscribers is about 800, which is, roughly, 120 more than at this time last year.

In the hopes of improving the general get-up of the Journal, I have, as you all know, been using a much better paper, and am illustrating every month. Judging from the comments made by the subscribers, the alteration is appreciated. But as you all know, the price of paper has increased about 500 per cent., and the cost of producing the Journal to-day is just about treble what it was when I was asked to take over the control three years ago, and now I am informed by the printers that owing to new awards being given to the compositors the cost of printing will be considerably increased, and I am compelled to ask you to agree to the price being increased from next month. The cost of the specimen copies and postage, with the increased cost of printing are the chief causes of the increased expenditure, as shown on the balance sheet.

Before closing, I sincerely thank those who by words of appreciation and encouragement have assisted me to bring the Journal up to its present form, and earnestly ask for assistance from those who are capable of sending along news items, so that the Journal may continue to grow in usefulness to our industry.

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H. G. B. B. B.

National Beekeepers' Association of New Zealand.

BALANCE SHEET FOR THE YEAR ENDING MAY 31st, 1920.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
Balance in Hand 31/5/19 ..	231	16 8	By Conference Expenses, 1919	33	4 3
Govt. Subsidy	100	0 0	„ Printing and Stationery ..	30	7 5
Govt. Grant Conference Report	20	0 0	„ Postage	49	9 3
Sales of Hand-book	36	5 4	„ Handbooks	89	2 2
Refund Conference Expenses, H.P.A.	8	18 9	„ Travelling Expenses	59	18 10
Sales of Badges	7	12 3	„ Refunds to Branches	67	17 9
Association Subscriptions ..	90	16 4	„ Telephones	5	10 9
Members' Subscriptions	48	9 0	„ Badges	24	12 5
Journal Subscriptions	202	15 0	„ Extra Labour	6	0 0
Journal Advertisements	85	7 4	„ Subsidy to Auckland Prov. Branch	6	0 0
			„ Hire of Hall Executive Meeting	1	0 0
			„ Refund of Advt.	0	17 0
			„ Advertising	5	11 0
			„ Printing Journal	184	12 4
			„ Salaries	100	0 0
			„ Bank Charges, &c.	1	5 0
			„ Petty Expenses	1	0 0
				£666	8 2
			Balance at Bank	220	0 8
			Less Unpresented Cheques	73	9 11
				146	10 9
			Cash in hand	19	1 9
				£832	0 8
	£832	0 8			

JOURNAL ACCOUNT.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
To Subscriptions	202	15 0	By Printing	184	12 4
„ Advertisements	85	7 4	„ Postage	41	17 6
„ Govt. Grant for Conference Report	20	0 0	„ Salary	65	0 0
				£291	9 10
			Profit	16	12 6
	£308	2 4		£308	2 4

ASSETS.		
	£	s. d.
Typewriter	£5	0 0
Duplicator	1	0 0
Government Subsidy	100	0 0
Handbooks on hand	24	7 6
Badges on hand	17	1 0
Balance at Bank	146	10 9
Cash in hand	19	1 9
	£313	1 0

LIABILITIES.

NIL.

Audited and found correct. 8/6/20.

(Signed) E. W. SAGE.

The President said that the Journal had proved an excellent means by which members kept in touch with one another. They would admit that Mr. Baines had proved an efficient Editor, and was doing good work.—(Applause.) He invited a discussion on the question of increasing the subscription to the Journal.

Mr. Baines explained that increased wages to compositors and the increased price of paper made it likely that the Journal Account would show a deficit next year.

After discussion it was unanimously agreed, on the motion of Mr. J. Murdoch, seconded by Mr. J. Ellis, to increase the subscription to the Journal from 5/- to 6/- per annum.

Mr. Baines: I take that as a compliment to myself, and I thank you very much.

On the motion of the President, seconded by Mr. A. Ireland, the Secretary's report and balance-sheet were adopted.

FORWARD MOVEMENT.

The President submitted remits from the Executive, placing the following before Conference for discussion:—

1. That in spite of our Apiaries Act and inspectorial staff, we are not making nearly sufficient progress in the checking of disease. In some districts it is questionable whether disease is not causing greater ravages than ever, and we think the time has arrived for a big forward movement in this connection. This assumption is supported by the resolution forwarded by the Clutha Valley Branch, whilst the recommendation by the beekeepers assembled at Ruakura indicates that increased vigilance is necessary to prevent the introduction of Isle of Wight disease into this country, and that importation of bees, queens, and honey should be immediately stopped.
2. That in order to carry this out, we ask for the immediate appointment of a Chief Apiarist and an enlarged staff.
3. That some new system of grading should be adopted in order to relieve the inspectors, and make it possible for them to concentrate on the inspection work.

Mr. J. Ellis (Poverty Bay) said that foul-brood was greater than ever before in his district, and unless there was proper supervision and the Apiaries Act enforced they were going to have considerable

trouble. His Branch had come to the conclusion that there should be a Chief Apiarist, also an increase in the number of instructors, and that the powers of local inspectors should be increased. He had been through a great many apiaries with their local inspector, and he found that there was more foul-brood in Poverty Bay than there was ten years ago.

Mr. L. Irwin (Southland) said that individual members of his Branch had expressed their strong desire that the Government should take action to control foul-brood by appointing a Chief Apiarist and providing an enlarged staff of inspectors, with power to prosecute those who do not comply with requirements for coping with foul-brood. Southland beekeepers said that the thing had to be dealt with, and dealt with effectively. He himself was willing to be taxed one shilling per hive per annum in order to provide for the additional inspectors.

Mr. E. W. Sage (Auckland Provincial Branch) said that he endorsed the remarks of the two previous speakers; in the North they heartily agreed with the proposition put forward by Poverty Bay and Southland.

Mr. W. B. Bray (Barry's Bay) moved—“That this Conference urge on the Government that the Apiary Division be made a separate Division, under a separate director, responsible to the Director-General direct.” He said that the Apiary Division was at present tacked on to the Horticultural Division, and there was no Chief Apiarist; none of the graders and inspectors could do anything without consulting the chief of the Division, and he was an orchardist first and last and the whole of the time. They could not, however, blame him, but at times it looked as if there was no control of the Apiary Division—no complete control. They should get the Apiary Division separated; they would then have a chance of the industry receiving the attention it was entitled to.

Mr. J. Rentoul seconded, and said that the industry was sufficiently large to have a separate Division.

Mr. C. J. Clayton said that after the existing legislation having been in existence for 15 or 16 years, it was undoubtedly that foul-brood was on the increase. It had been his business to go round about the apiaries, and there was more foul-brood about at present than there was 15 or 16 years ago. It was not confined to box hives; his experience was that there was more foul-brood among bees in bar-

examined hives. More inspectors were wanted; it was a wonder to him how the present inspectors got over the country and did grading and judged honey at shows. The judging and attendance at shows should be cut out, and the inspectors should concentrate on fighting foul-brood. An intelligent woman could be taught to do grading.

Mr. E. G. Ward said that he supported, with all the influence he held, the advocacy for more inspectors; it was quite plain that the present inspectors could not cover the ground and give satisfaction: they could not administer the Act.

Mr. T. Clark said he had no doubt that all were agreed as to what was wanted, but not as to how they wanted it. Beekeepers felt that Mr. Kirk, the head of the Division, was an out-and-out orchardist; that he could not say that Mr. Kirk had not given them a fair deal. The reason beekeepers had not got sufficient was because they had not asked in the right way. They had not put sufficient "punch" into what they had asked. He suggested that the mover and seconder should discuss the matter with Mr. Campbell.

The President asked Mr. Campbell to speak on the subject.

Mr. Campbell said that he did not want to say anything that would influence the Conference one way or another to do anything it would otherwise do. As to the proposal for a separate Apiary Division, they had the principle that "division is weakness." If a small division were created, it was probable that beekeepers would get less consideration than they were receiving at present when they were attached to what was really a small Division. What they should go for was a Chief Apiarist attached to the Horticultural Division; they would then get practically what they wanted. Mr. Kirk had been striving for everything that the Association had been working for, and had been striving in every way: he had files in his office that proved that, but the final decision did not rest with the Division. If they formulated their scheme, and advocated it with sufficient "punch," they would get all the assistance Mr. Kirk could give them. It was the beekeepers who must convince the Department, the Director-General, and the Minister. He thought that they would get on better by going for a Chief Apiarist and for an increase in the inspection staff.—("Hear, hear") This should be done by showing the Director-General and the Minister the absolute necessity, in the interests of the industry,

for foul-brood being controlled, and the impossibility at the present time for those employed by the Department to give the result beekeepers were asking for. They should go directly for cleaning up districts where foul-brood existed; it did not matter to beekeepers how that was done so long as it was done. By doing this they would be working along the lines that the Division had been working in their behalf for some considerable time.

Mr. A. Ireland moved as an amendment, and Mr. W. E. Barker seconded—"That this Conference urge upon the Government the necessity for the appointment of a Chief Apiarist and an increase in the staff of inspectors."

The President suggested to Mr. Bray that he should withdraw his motion.

Mr. Bray said that he was inclined to stick to his motion.

The amendment was put, and was declared carried. A show of hands was demanded; only ten voted against the amendment.

On being put as the substantive motion, the amendment was declared carried unanimously.

The President: I would like to convey to Mr. Campbell the fact that we are unanimous about this business, and that we are in earnest about it: we want something done; we don't care how it is done, but we do want foul-brood controlled from one end of the Dominion to the other, and an end put to the present—

A Voice: "Tinkering."

The President: Yes, tinkering. It will pay the Government—it will pay the country to do it; and it will increase the wealth of the Dominion.

ISLE OF WIGHT DISEASE.

Mr. E. G. Ward moved the following portion of the Executive's first remit:—"That increased vigilance is necessary to prevent the introduction of Isle of Wight disease into this country, and that the importation of bees, queens, and honey should be immediately stopped." He said that they could claim that in New Zealand they had as good bees as could be got, and foul-brood was the result of importing queens from other countries. Foul-brood being in the country was spreading wholesale.

Mr. C. A. Jacobsen seconded.

Mr. A. Ireland said that a similar remit was agreed to unanimously on two previous occasions. Had nothing been done? Why should it be passed again?

The President: We have to do a lot of things again.

Mr. F. C. Baines said that Mr. Kirk told him the previous week that he had placed the matter before the Government for five years, and had urged the prohibition of the importation of queens, bees, and honey. There was a big risk in importing honey from Australia, where the "disappearing trick" disease was prevalent—a disease that little was known about. There was danger of the disease being imported with the honey.

Mr. W. B. Bray said that the "D.T." disease had been in existence for the past 15 years. The Victorian Bacteriologist sent to New Zealand for some bees, and found that the "D.T." disease existed in the Dominion.

Mr. Irwin said that Mr. Kirk apparently had done all he could; there was someone higher up than the Division who had prevented the beekeepers from getting satisfaction, and was blocking them. How were they to get their "punch" in?

Voices: "Members of Parliament."

Mr. Irwin: We should get our "punch" in there as quickly as possible.

Mr. Sage said that while this prohibition was desirable from the beekeepers' point of view, was it fair, seeing that New Zealand was exporting quite 75 per cent. of its honey, to prevent honey from other countries coming in?

Mr. Gardener strongly objected to the importation of bees; but the life of a queen was only four or five years. At the end of ten years what sort of bees would there be in the Dominion?

Mr. McLean: Why cannot New Zealand breed as good bees as those that are imported?

Mr. Davies said that his Branch had passed a strong resolution on the subject.

Mr. Watson suggested that if "honey" were cut out of the motion, it would be agreed to without opposition.

The mover and seconder agreed to the deletion of the word "honey" from the motion, which was then unanimously agreed to.

GRADING HONEY.

The President said they now came to the third remit from the Executive:—"That some new system of grading should be adopted in order to relieve the inspectors, and make it possible for them to concentrate on the inspection work." He suggested that representatives present of the

N.Z. Co-operative Honey Producers' Association should speak on the matter.

Mr. C. F. Ryland said that the H.P. had realised for some time that the present system of grading was not entirely satisfactory—it was not sufficiently elastic to enable them to satisfactorily open up markets in countries other than Great Britain. The matter had been before the Board of Directors, but all the necessary data had not been collected, nor had there been an opportunity to go into the matter with the officers of the Department. Mr. Kirk had informed them that they would have an opportunity to talk the matter over with Mr. Campbell and the three Government graders in Christchurch.

The President said that they wanted some better system of grading in order that the grading should not take up so much time of the inspectors too much. He suggested that Mr. Campbell should confer with the representatives of the H.P. and report to Conference.

This was agreed to.

DEALING WITH FOUL-BROOD.

Mr. W. Kennedy asked why no prosecutions had taken place in respect of the existence of box-hives in the Methven district last year. He alleged that the owners of the box-hives did not destroy the colonies and honey.

Mr. E. A. Earp, Government Apiary Inspector, said that when Mr. Kennedy mentioned the matter to him last year (Mr. Earp) sent inspectors to the district. They had rid the district of most of the box-hives. No prosecutions had taken place, that being at Mr. Kennedy's expense.

Mr. Gardiner asked why Mr. Earp had been guided by a beekeeper.

Mr. Earp said that he had seen the necessity for prosecuting, as they were unable to get rid of the box hives without going to that length. They were first all instructors and then inspectors, and the Department's policy was to prosecute only as a last resort.

DISTINCTIVE MARKS ON CASES.

Replying to Mr. Ireland, Mr. Earp said that if all the cases submitted were of uniform grade, then they were passed as one lot; where there was a noticeable difference in the colour or flavour, it was necessary on the part of the beekeeper to mark the cases, as it assisted grading.

PENALTIES FOR BREACH OF ACT.

Mr. Ellis moved:—"That the Conference reaffirm that the maximum penalty for breaches of the Apiaries Act be increased to £20."

Mr. Baines seconded, and said that Mr. Kirk had brought the matter before the authorities, but nothing had been done.

Mr. Campbell said that owing to Parliament concentrating on war legislation, it had been impossible to get the Apiaries Act amended. It might be possible to get it amended during the coming session.

The President suggested that the motion should incorporate a remit from the Grey-mouth Branch that the minimum penalties should be £2.

This was agreed to, and the motion was adopted.

REMOVAL OF HIVES AND BEES.

Mr. Sage moved:—"That no bees, hives or appliances shall be removed from one county to another county without the written authority of the inspector for the district."

Mr. Ellis seconded.

Mr. Bray suggested that the prohibition should be "from one place to another," and that the Act should be amended by deleting the word "knowingly" from the section dealing with the removal of bees, hives, and appliances.

The motion was discussed at some length.

Mr. Campbell said that an amendment of the Act would be necessary. Certainly something more definite should be done in respect of the removal of bees and the spread of disease in that way. He thought that the motion should refer only to bees, hives, or appliances when they changed ownership; that would not interfere with a beekeeper shifting bees of his own to an out-apiary in another county.

The motion was agreed to.

HONEY AND METHODS OF HANDLING.

The President read the following paper:

Mr. Chairman,—I am down on the programme to open a discussion on the subject of "Honey and Methods of Handling." In order to be concise and to the point, I have put what I have to say on paper. It is a common saying that no two faces are exactly alike it is equally applicable in the case of honey. No two honeys are exactly alike in colour, flavour, and texture. Every plant from which the bees

gather nectar gives a honey having its own characteristics in the qualities mentioned. In colour they vary from water white to almost black; in flavour from the luscious white clover to the nauseous ragwort; and in texture from honeys that extract quite easily to honeys that refuse to leave the comb at all. Added to this is the fact that bees may and more often than not are gathering from varying sources, and that therefore nearly all of our honey is mixed in the hive, and on that account the variation is still greater. Under these circumstances the marketing of our honey is made very difficult, and very often results in a good deal of dissatisfaction. We have no standard, known on the market, on which we can quote. What has been done has been to class the honey according to colour—water white, light amber, medium amber, and dark,—but each of these colours represents a range of colour equal to one-fourth of the range from water white to dark. They also represent a range of some five or six other qualities on which they are graded, the outcome of the whole arrangement giving such diversity of result that no standard of any use to a business man on the market is arrived at. The proof of my contention in this respect is available in the business of the H.P.A. When it was determined to push our present system of sales on the local market, a standard became at once necessary. The classification and grading of the Department gave no standard, and therefore was of little use. The only way to get a uniform standard is to blend to one colour and flavour, or as nearly so as possible. This is being done at Auckland, and the results are proving very satisfactory, though in the south the standard set is regarded as rather dark. Still the object aimed at has been gained—the honey is being sold for forward delivery and according to standard.

With regard to Government grading, while I disagree with the schedule adopted as being unnecessarily complicated, I admit that the classification by colour is all that can be done—that is, as long as grading of individual beekeeper's lots is done; but I maintain that the system of grading for the individual will break down; that as our industry grows it will prove more and more unsatisfactory, until something is found to take its place.

After a good deal of consideration, I have come to these conclusions:—

1. That in order to successfully market, it is necessary to standardise, both in quality and colour of the honey, and in package.

2. That the only way in which that can be done is by blending and packing in a factory; and
3. That a simplified form of grading dealing with samples from 5 or 10-ton lots, instead of as at present from each individual 60 lb. tin, should then be adopted.

I do not wish to find fault with our present system. It has done good work, but we live in an age of progress, and the time has come when it must be superseded by something better. We are growing, and the possibilities that lie before beekeeping are far greater than most of us realise. Let me use an illustration that will make my point of view clearer. Suppose that some twenty Dairy Companies, turning out an average of 100 tons of butter, are shipping at one port. It would mean 2,000 tons of butter, but the Agricultural Department can arrange the grading of that amount quite easily. And such is the confidence in their work that their grade note becomes the certificate on which the butter is sold. The grading is greatly assisted by the fact that there is very little variation in the quality of the product. The managers in those 20 factories are all taught in one school; they are all working on similar lines. A standard of quality is easily reached, and the buyer has come to know that standard so well that he buys with the utmost confidence. But suppose that the 400 or 500 dairy farmers who supply those factories were to resolve to manufacture at home, and send their butter to the port for grading for shipment. What about it then? Some of it would be as white as the milk it was made from; some of it would be extreme at the yellow end; some of it would be streaky; and some of it would have other qualities. Texture and flavour, and in some cases aroma, would come in. Now, how is the grader going to get a standard out of that lot? Well, that is just exactly what our graders are trying to do for us in honey. Perhaps you will say, "Yes, but the butter is a manufactured article, and the faults are those of manufacture. Ours is a finished article. Can we not by a simple process of sorting out reach a standard?" No, we cannot reach a standard; we may, if we sort it out sufficiently, reach a dozen standards, and the variation in each of the dozen will be its main characteristic. Suppose to carry our illustration a little further, that Mr. Ryland had the job in a co-operative way to sell the butter of those 500 dairies, how do you think he

would go about it? He would have it sorted out into, say, three grades as it was received, blend each of the grades as a butter worker, and then have it graded for the market.

In our fruit industry we are up against the same trouble: we want standards for export. These are, as in honey, fixed by regulations, and the Government grader is the judge of our success in conforming to the standard. We find that the individual orchardist, in nine cases out of ten, cannot handle his own fruit; he packs it, and forwards it to the wharf, only to have it turned down. We are compelled in our own interest to form companies and build packing sheds, and have the work done by expert packers who are not personally interested in the fruit. Then we get an even standard of fruit and pack, and the grader passes it as it leaves the shed.

In dairy produce it is a matter of manufacture; in fruit it is a question of sorting and culling and packing; in honey it is a matter of blending to bring our light amber honeys to one uniform standard, and to do the same for medium and dark. My contention is that blending would be for our honey industry what the factory system and the packing shed have done for the dairy and the fruit industries, and that we will never get a satisfactory solution of our marketing problem until we adopt it. Further, the attempts to standardise by grading alone is costly and unfair to the industry, because it monopolises too much of the time of the Department, and cannot in my opinion succeed.

The opinion has been expressed that the factory handling will add to the cost of the honey. I have not the figures to controvert that opinion, but the detail of the expense incurred under our present system, judging by the amount of work done, is not much work is done for nothing these days, will probably show that the factory is very little if any more expensive; it may, when storage is taken into account, and certainly will when home work is taken into account, prove a great saving. One of the great drawbacks to our present system is the bogey of granulation. We have to store our honey at home until it granulates. This may be anywhere from two to six months; usually the riper the honey the longer the time. This delay, coming at the end of a year's work to produce the honey, makes it a great temptation to try and realise in some other way. Most of us want the return for our year's work as quickly as possible after it is produced.

I have been blamed for agitating in favour of this change before the H.P.A. I was ready to carry it out. My plea is that all forward movement must come from the rank and file of beekeepers. Neither the H.P.A. nor the Apiaries Department will be any better than we make them, nor do they want to be. Neither of them are independent institutions. Their work is to feel the pulse of the industry and to do the best they can for it. I am hopeful that both of these institutions will come forward—Mr. Ryland for the H.P.A. and Mr. Kirk for the Department—and tell us what they are prepared to do in this matter. I feel certain that as far as blending is concerned, Mr. Ryland fully recognises its value from a marketing point of view, and that Mr. Kirk will welcome a system that would bring our honey into line with dairy produce and fruit, and make it possible to do satisfactory work in grading.

I agree with Mr. Rentoul, whose work as Chairman of the H.P.A. I fully appreciate, that we must be careful. As we take each forward step we must prove it, but don't let us be too slow about it. We know all about the early bird: let us follow his example.

Mr. J. Rentoul said the question of fermented honey had engaged the attention of the H.P.A., and they would like to see the Bacteriological Department take the question up. As to grading, it was all behind, and the only way out was to grade in bulk, and that could be done only in bulk stores. Blending could be done only by experts; the H.P.A. was doing it, and had been fairly successful. Provided honey was delivered into bulk stores, all the season's honey could be blended so as to get uniform grades of each colour, and the season's output could be graded in a few days instead of months.

Mr. C. F. Ryland said that the H.P.A., which was purely a business proposition, had decided that the depot system, on the surface, appeared to have decided advantages over the present system: it meant saving of time and money, and a consequent better return to the producer. It had been decided to start the experiment on a large scale at Timaru, very much on the lines indicated by Mr. Allan. His (Mr. Ryland's) opinion was that it could be entirely successful. It might be necessary for the regulations to be simplified; he did not doubt the Department would be willing to do so. As the result of blending in Auckland for the New Zealand market, the H.P.A. had sold

and delivered 500,000 lbs. of honey, and it had repeat orders in hand for a similar quantity. The price received was considerably in advance of that previously obtained, and consequently the H.P.A. looked upon the experiment with some degree of satisfaction. He emphasised the necessity, in connection with the export trade, for provision being made for a grade lighter in colour than 'white'; the New Zealand grade of 'white' was considered to be 'light amber' in certain overseas markets, which meant in America that it fetched 2d. to 2½d. less in price than honey graded as 'white' would fetch.

Mr. Campbell said that anything considered by the Conference to be of advantage to the industry, or that went to maintain standards and reduce labour and simplify methods of handling and grading, would be very readily taken up by the Department. If they could standardise methods they would make considerable progress.

In further discussion, speakers referred to the favourable experiences they had had in respect of dealing with honey in bulk.

On the motion of Mr. Bray, seconded by Mr. J. C. Gibb, the President was accorded by acclamation a vote of thanks for his paper.

“PADDLING” HONEY: IS IT ANY GOOD?

Mr. Fred C. Baines read the following paper:—

I am going to preface my remarks by making a few quotations from old Journals.

In August, 1914, I gave a description of paddling honey for the elimination of a coarse grain whilst it is granulating. In December, 1914, Mr. F. A. Jacobsen gave an article bearing out my remarks. In October, 1915, Mr. W. E. Barker says:—“Last season I gave ‘paddling’ a good trial. Result: Five cases turned down by the grader as too soft—a trouble I have never suffered before.” In November, 1915, Mr. J. S. Cotterell says:—“Honey so treated by me lost points . . . whilst the condition was not as firm as unstated honey.” And in the same issue Mr. I. Hopkins writes:—“Whilst at Matamata I accidentally stumbled on a scheme of improving the texture (grain), and also to a certain extent the colour of granulating honey—a simple process, to which no one

can take an objection. On one occasion I had overlooked removing some honey from the lower part of an uncapping can that had drained from cappings until it had so far granulated (though still soft) that it would not run through the honey tap. There was quite 100 lbs. in the can, and knowing that by stirring the honey it would be made soft enough to run, I worked it well with a wooden paddle until it slowly ran through the tap. Not having been properly strained, I set this honey apart from that I was marketing. Some time after, when it had become firmly granulated, I was surprised to find the grain or texture of this honey much finer and the colour somewhat lighter than that extracted from the same combs. After giving the matter much thought, I wondered whether the stirring of the honey had made the difference, and as the last of the honey had been extracted I had to wait until the next season before conducting conclusive tests. The results of several tests proved to my own satisfaction that stirring honey when commencing to granulate does improve it."

These remarks by experienced beekeepers would naturally confuse any one who really wanted to know whether "padding" honey was a desirable thing, and the object of this little paper on the subject is to bring about further discussion on the matter, as I personally believe in "padding" for improving the marketable value of our honey.

I have here a sample of honey as taken from the tank previously to having 20 lbs. of granulated honey stirred into it. This was extracted in December, 1916, and as you see is not properly granulated yet, and what granulation there is is very coarse and sugary. The specific gravity of this honey is 1.480, which indicates that it is well ripened, but for all that it hasn't granulated. This other sample is the same honey after treatment, which, you will notice, is to all appearances a much superior honey, with a finer grain, and the grader's remark on the grade note was "A remarkably fine flavour for a dark amber honey." Grading, B Grade, with 89 points.

The sample here is one of my last season's crop taken before "padding," and although extracted in February last is really not firmly granulated yet. This other sample is taken from the same tank after treatment, and here again you will admit there is an improvement in the grain; also the colour is degrees lighter. The specific gravity of this honey is 1.485.

I think you will all agree that in the light of my experience and the exhibition of these samples, that I have made in my case that "padding" does improve honey.

There is, however, just this to be said that, like many other good things, it can be carried too far. You can stir honey whilst it is granulating to such a degree that you will eliminate all the grain, and get it into a condition resembling condensed milk, only a bit firmer. The honey will have a silky appearance, and will never granulate hard and firm. If stirring has been carried to excess, the honey has been turned down, although there have been cases where honey that has been allowed to granulate naturally has been turned down for soft granulation.

I can only say that I have practiced "padding" now for five or six years, the only honey I had refused for export was a small lot that I did not treat. I didn't think it was worth the trouble, but the result proved that it would have been.

My practice is to save about 30 lbs. of honey from the previous season, which had been treated. This is put in a kerosene tin, and then filled up with liquid honey from the tank, and stirred until it is in a liquid granulating state. The whole is put into a bucket and stirred for about a quarter of an hour with a paddle made of a piece of timber 9 x 3 x 2 inches, with a broom head let in. The honey is kept well covered and allowed to stand three days, when it will be found to be granulating through. It is then stirred every day until it is in a state of liquid granulation when it is tinned off.

I hope these few remarks will lead to a profitable discussion.

The samples shown by Mr. Baines were critically examined by the members, and it was generally conceded that the honey raised in Mr. Baines' district was decidedly improved by stirring.

A brief discussion ensued, and Mr. Baines was accorded a vote of thanks.

BEEKEEPING IN ENGLAND.

Mr. A. R. Bates gave an address on "Beekeeping as I Found It in England" in which he dealt with his experience whilst acting as an instructor in beekeeping under the educational scheme adopted by the N.Z. Expeditionary Force after the signing of the Armistice.

After the signing of the Armistice, I was offered and accepted the appointment of instructor in beekeeping under the N.Z. Expeditionary Force education scheme. I commenced at Torquay, giving a short course of twenty lectures and demonstrations. The Department procured a fairly complete set of appliances, charts, &c., also a hive of bees, this being my first introduction to bees in the Old Country. We paid £5 for the stock: a 10-frame single storey hive; Italian bees. They were much more gentle than any I had ever seen: we could handle them without protection of veils or smoke. I put about 200 "diggers" through the course, and that, with the other instructors' efforts, should ensure a good swarm of new beekeepers for New Zealand. I wrote the Secretary of the B.B.K.A., stating the work I was on, and asked for information as to beekeepers in Devonshire we could visit; also for literature that might be useful. I received no reply, but was sent a catalogue of beekeepers' supplies. A number of beekeepers I met in England since had a similar grievance against the B.B.K.A., which appears a moribund institution.

After a good deal of "fossicking," I met a number of men in a small way of business all keen on bees and interested very much in New Zealand conditions. Several of them practised migratory beekeeping, moving their hives to the Dartmoor Hills in July for the heather flow. There are thousands of acres of nothing but heather, producing a dark aromatic honey, the consistency of our manuka. Sections of this were retailing at 3/6 per lb. The only apiary of any size I visited in Devon was one of 100 colonies at Buckfast Abbey run by the monks, quite as up to date as anything in New Zealand. Their hives and gear were Root's manufacture. Amongst other items of interest were an electrically driven extractor and a queen incubator, the latter being necessary owing to sudden drops in temperature sometimes experienced. As Isle of Wight disease had made great inroads among the bees in the South of England, the monks were finding it a better proposition to raise bees for sale than produce honey. Three-frame nuclei were being sold at £2 10s. Our party was made very welcome, and shown over the apiary and plant. The brother in charge attributed his success in combating disease to keeping a good hardy strain of Italian bees, and spraying "Izal" about the hives after a cleansing flight by the bees. While at Torquay I conducted parties of prospective beekeepers to Bristol, on the invitation of

Major Norton, of the Bristol and Dominions. We were very hospitably entertained, and shown the process of packing New Zealand honey for the retail market. One cannot speak too highly of the care taken of our produce and methods of handling.

Later on I was transferred to London, and was fortunate in being able to make several visits to beekeepers in Kent. I was invited to attend a Field Day held by the Kent Association at Rochester, a very pleasant outing. Here again I was unable to get in touch with any commercial apiarists. In company with a fruit-growing party I spent a day at Wye Agricultural College, which primarily is devoted to fruit culture and research work on diseases, and has a sideline on beekeeping, just being started with about a dozen colonies. My next visit of interest was to Mr. Taylor's Bee Supply Factory at Luton. I was particularly interested in his Weed foundation plant, which was turning out one and a-half tons weekly, though very poor quality in comparison with American and New Zealand makes. Mr. Taylor was acting as distributor for the Government of imported supplies, and was storing 1,000,000 sections landed from America. The Government has a big re-stocking scheme on hand, and is importing thousands of stocks of bees from Holland. The Dutch bees are slightly smaller than our blacks. They were at first thought to be immune to disease, but later experience showed differently. Mr. Taylor had about 50 stocks recently landed, all in straw skeps, which still exist in considerable numbers. Beekeepers seem very adverse to any control by means of Apiaries Acts.

A small party of us made a trip to Kilmarnock Agricultural College, where the bee expert, Mr. Tinsley, showed us over the apiary—60 to 80 colonies. A number of cadets were being trained similarly to Ruakura, and a considerable amount of research work in connection with bee diseases was undertaken. Mr. Tinsley wished me to send him samples of our honey, stating sources from which it was gathered, for analysis. He stated that foul-brood was no scourge with them, and they never destroyed a comb because of it. They de-queened, and allowed the bees to clean it up. He also had a firm conviction that the germs were never carried in the honey. In reply to questions, he stated that he referred to rosy American foul-brood. Must be milder than ours!

I witnessed a demonstration in handling bees at Norwich Show, and had a very interesting chat with the gentleman in

charge of the bees. He had a nice-looking docile lot of bees, and offered to present me with a couple of queens to take home with me. I thought the risk of importing Isle of Wight disease was too great, and did not accept. He gave me addresses of several apiarists, including one with 1,000 colonies, but unfortunately marching orders did not enable me to make a visit.

Beekeepers in England appear to be under many disadvantages in comparison with New Zealand conditions. Apart from a more severe climate, which compels them to use double walled hives, they lack the organisation and co-operation we happily possess. The commercial men appear to have nothing to do with the B.B.K.A., and there is talk of forming a new Association. The standard frame adopted in England is not altogether satisfactory, being one-third shorter than the Langstroth, and the split top-bar is a good home for wax moth and a nuisance to attach foundation in.

The hives in use appear to lack the simplicity of design necessary for cheapness and easy handling, and a number have various contraptions attached that appear anything but desirable. The beekeeping journals print a lot of advertisements for drugs to cure or prevent bee diseases, though most prominent beekeepers pronounce them useless. During the war, owing to sugar shortage, the Government would not allow any to be used for bee feed, and numbers of colonies starved out. Next season they had a lot made up into candy costing 1/- a pound, medicated with bacterol and coloured pink. A slip attached pronounced it unfit for human consumption. Probably it was, as there were many complaints of bees fed on it dying off.

I do not think at present we can learn a great deal from the British beekeepers, except what to avoid, but some of the colleges devoted to research work should produce good results. We might with advantage have similar institutions in this country.

Mr. Bates was accorded a vote of thanks.

IMMUNITY FROM DISEASE.

The President said that Miss Shepherd had suggested to him that Conference might discuss the question of breeding queens for immunity from foul-brood.

A brief discussion ensued, and on the President's motion Miss Shepherd was thanked for her suggestion, and was assured that the Association would assist her in every way possible.

Miss Shepherd said that she would like the question tested at experimental stations—that it should be taken up at the Government apiaries. She felt quite sure that the thing could be done if it were taken up with determination. She did not think that private beekeepers should be expected to experiment in the matter.

PARLIAMENTARY ACTION.

Mr. J. McCombs, M.P. for Lyttelton, attended, and briefly addressed the Conference. He suggested that a deputation from the Conference should wait on the members of Parliament for Canterbury at their next meeting.

The President thanked Mr. McCombs for attending.

“NEW ZEALAND FLORA IN RELATION TO HONEY.”

Mr. W. E. Barker read the following paper:—

Mr. President,—When the ever-pressing Mr. Baines urged me to contribute an article to this Conference on the flora of New Zealand and its relation to our honey, I, like the ladies, felt I could not resist him; but I am an old man, well stricken in years, and abominably lazy. I decided to compromise, and give a re-bash of a former paper read at the Beekeepers' Conference some years ago, which several of our grey-heads will no doubt recognise, adding thereto a little that may be of interest to all honey producers.

It has been said that the native flora of New Zealand was of very little use to beekeepers, as the flavour of the honey derived from this source was so pronounced as to be in some cases unmarketable. I would combat this statement: 'tis the flavour of our native flora that gives to our honey that "click" which makes it lead the world. "Pure Clover Honey" is but a tradesman's term that has caught the public eye, but not its palate, and to most it is an insipid article, and lacks flavour. It is on a par with "Prime Canterbury Lamb" as a good selling name. Anyone contemplating setting up as a producer of prime extracted honey should see that his apiary site is contiguous to an area containing a good percentage of our native flora, so that the clover honey he produces may have that added flavour that the public appreciates.

This studying of the flora of our respective districts is not sufficiently practised by our apiarists. A man should so know the nectar producing capabilities of the flora in the district his apiary is situated

as to work up his bees to be in a position to make full use of the flow as it comes along, for in no industry is the "saw" more true than to that of the honey producer that "the race is to the swift."

Some of our flora is undoubtedly very strong. That from the kowhai, for instance, is as bitter as gall, but as it flowers so early in the spring, it serves as spring feed, and is all consumed by extracting time. That from the fuchsia (Konini), which should be extensively cultivated and preserved by all beekeepers, as it is so easily and quickly grown, gives to our honey that exquisite flavour known on the London market as the "muscatel"; and those who are situated near the rata know what a distinctive and pleasing flavour it gives to the local product. But it is more the general admixture of the flora of the district as a rule which gives to our clover honeys their superior flavour.

One very puzzling peculiarity of our native flora is the way it is at times neglected by the bees. I have aforetime mentioned how seldom they work the manuka with me. This year the hini-hini flowered most profusely, scenting the whole air of an evening with its sweet perfume; yet, notwithstanding the lack of clover blossom, it was totally neglected, though assailed greedily by other flies. The native vine also flowered in May, and though visited by ordinary flies—even some of the hymenoptera—was unvisited by the bees, though flowering close to the apiary. Yet they seemed very busy, and the only other available supply I could think of they could prefer was the Cape-weed, and that was almost conspicuous by its absence. If the vine and the hini-hini were producing nectar, why were the bees not seeking it? If they were not, what was attracting the other flies? In fact, the bees this season seem peculiarly contented—what with, I am at a loss to discover. Perhaps they were, like the Socialists, as they are said to be, just diving into one another's homes, living, so to speak, from hand to mouth. But all joking apart, I am inclined to think that the true reason is that though the native flora flowered so profusely, it did not to any extent secrete nectar owing to the lack of suitable atmospheric changes, which undoubtedly greatly influence a good flow, for it was a poor honey flow all over New Zealand; so whilst the ordinary fly, which truly can be said to live from hand to mouth, stopped to the flora's scanty sweet supply, the more provident bee went to where the supply was more adequate to the energy

expended. It is rather remarkable that that large family of plants, the Coprasma, so well represented in our mountainous districts, the micky-micks of the colonists, so conspicuous with their varied coloured berries are non-nectiferous, depending on their fructification to rude Boreas; in other words they, like the nut-trees, are aerobic, and hold out as a bribe to the birds instead their bright drupes, who in turn disseminate their species for them over the land.

A peculiarity about New Zealand trees that does not seem to have been much commented on by apiarists is that many of them take two years to mature their seeds, during which time they constantly secrete nectar, which is greedily collected by the bees both in the spring and autumn. I mention particularly panax and lancewood, which hum with contented bees at these seasons. Being situated near a patch of bush, I seldom resort to spring feeding.

It should be remembered that all trees are capable of producing honey from either their leaves or from the cambium layer, or inner bark, given certain atmospheric changes. This is not honey-dew, such as is secreted by aphides, but true nectar. I have known a tree that for years had been sheltered in a plantation, on its fellows being removed, secrete such a copious flow from its bark and leaves that it burst the outer bark and produced more nectar than the bees from the adjacent apiary could collect, and a perfect orgy of drunken bees and moths ensued at the foot of that tree. There the stored-up starch of the tree was suddenly converted into saccharine by exposure to the sun's rays.

A still more interesting observation was that recorded by Mr. Stewart, who found the bees in the North of Auckland working the bracken fern, a well-known storer of starch in its roots, but one that one would never expect to turnout a producer of nectar. So that at any time an apiary situated near our native flora may derive an unexpected flow from such sources. I have no doubt it was from the irritating of the bees in search of food at the base of the patioles that originated in prehistoric days and permanently fixed the nectaries from which the modern bee obtains its main supply, and in the course of ages greatly accentuated that flow. And here we beekeepers become the friend of the farmer. When the farmer milks his cow, he induces a flow of milk into the lacteal glands, and that induces the cow to pull the grass to make good the loss; so, likewise, when the bees fossick for nectar,

they induce a copious flow of the same, which induces the roots of the plant and the leaf alembics to elaborate an excessive supply of saccharine. It is just the ordinary application of the law of demand and supply unspoilt by the go-slow policy. Ament which Mr. Tarlton Rayment, in "Money in Bees" (page 270), falls into a strange error. He says:—"For it must be understood that the flowers secrete nectar only as an inducement to insects to visit them, and thus carry the fertile pollen from flower to flower. In this way seeds are made fecund, and the species multiplied. For instance, a newly 'rung' tree will yield honey very heavily in the endeavour to have as much seed as possible made fertile in order that the seed may be perpetuated." This is surely attributing immediate reason to plants. What actually occurs is that the cooling sap supply from the root system being cut off, the overheated sap gets turned into saccharine. This is well seen when an apple tree gets ring-barked by a hare; it may bear fruit for two or three years, and each year the fruit is more and more highly coloured. Thus also we induce pears to fruit freely—not because the pear thinks it will no longer be able to reproduce its species, but because under ordinary circumstances it produces such a ready flow of sap that the leaf alembics without its curtailment cannot transform it into that quantity of reserve saccharine matter which we desire, and call pears. Again, at page 246, in a rather obscure paragraph, when touching on "rung" trees, he makes the somewhat amazing remark: "Possibly honey secreted under such circumstances is deficient in some of the elements necessary for the maintenance of bee life, that honey from any plant during normal life should be detrimental to insects, it is hard to believe," &c. The contrary is the case; one can well believe that the large family of eucalypts in their young and vigorous stage may often secrete a nectar deleterious to bees, yet that when "rung" that same nectar may become innocuous, for the sun's rays being able to re-work and ripen the same in the cells of the tree, eliminate in the process the deleterious substance. We see this process in our own flora, as in the case of our so-called poisoned honey, attributed to *Ranunculus rivularis*, and possibly others. No doubt in the gathering of that honey, as with the eucalypts, a great diminution of bees may be observed, and the honey brought in may poison those who eat it; but if given time in the hives to artificially ripen, the deleterious substance is driven off. Very likely, I think

this may account for the apparent neglect in New Zealand of the native flora at times: the bees become "gun shy," and if as thoughtful as Mr. Rayment, and to think plants are, they probably say:—"Thanks, no more to-day; that last time gave me a pain." In point of fact, contrarywise, how little mind enters into the economy of plant life may be guessed from the ease with which we fool plants into producing double flowers.

"Exulting Nature so delights,
So riots in profusion, she
Twice over does her work for glee
A tangled intricacy first she weaves,
Under and upper growth of bush and tree
In rampant wrestle for ascendancy."

The botany of New Zealand as a whole is of a most interesting character, and has run foul of my geological studies on many points; and these points affect the bee industry. From a geological point of view, New Zealand is most interesting as being evidently a relic of an ancient continent, now plunged beneath the depths of the sea, extending from the Antarctic to South America, and also to Norfolk Island. A great preponderance of plants are identical with those of Terra del-Fuego—i.e., our birches (or *Fagus*), which by the by is often the beekeepers' bane on account of its being so liable to be attacked by aphides which secrete a large amount of honey dew—*Fuchsia* (*F. corticata*), pepper-wood, kowhai, broad leaf, veronica, &c. This to a geologist points to a land connection at some past date. Then came on apparently a great change in our climate with its concomitant fight for existence amongst things living and gradual change of foliage to meet the same. As the poet, Shelley, beautifully put it—

"Those wastes of frozen billows that were
hurl'd
By everlasting snowstorms round
Poles,
Where matter dared not vegetate or live
But ceaseless frost round the vast
tude;
Bound its broad zone of stillness, are
loosed,
And fragrant zephyrs there from spir-
isles
Ruffle the placid ocean-deep, that ro-
Its broad bright surges to the slop-
sand,
Whose roar is wakened into echoing
sweet,
To murmur through the heaven breath-
groves,
And melodise with man's blest natu-
there;

Those deserts of immeasurable sand,
Whose age collected fervours scarce allowed
A bird to live, a blade of grass to spring,
Where the shrill chirp of the green lizard's love
Broke on the sultry silentness alone,
Now teem with countless rills and shady woods,
Cornfields and pastures and white cottages."

Thus evidently our lancewood, which in its young state is such a characteristic feature in our bush, having a mid-rib so tough that in the early days we used to use them for boot-laces, in a warmer climate had such a stout mid-rib to support a very broad leaf, when it had to conserve its powers to exist, it lessened its breadth. But should the climate change gradually once more, in the course of ages, it could once more revert, so long as in its cell-contents it preserved this embryological structure. The lancewood is a prolific honey producer, often in the autumn, and is strictly dioetius—i.e., the plants are either male or female. Now, this is another interesting fact that points to the great antiquity of New Zealand. No other country has so many plants either dioetius, or partly so. Now, being stationary is a distinct handicap to plants in the race for life, for when they want a mate they can't go in search of one, but have to trust to the wind or to insects to bring them that blessing. Here I may say we are up against one of the greatest mysteries of the world, which makes it to me worth living in—that is, the deliberate bribing by Nature of the higher orders to do its requests. Here, for instance, we see a beautiful red fungus (*Assoe collenzoi*) protrude its fingers out of the earth. We stoop to pick it, and are repelled by its offensive odour. The hungry blue-bottle, on the other hand, stoops, deluded, on its mid-flight in search of carrion, supps of the fetid mass, and so fulfils Nature's desire by carrying its contained pollen masses to the next fungus that peeps expectant out of the neighbouring soil. So with plants of a higher order: we find them also holding out bribes to birds, bees, and other insects to do their behests. Our greatest scientists draw back defeated before these simple facts. As Professor Bergeson sagely says: "Instinct is nearer to God than reason."

"How strange is human pride;
I tell thee that those living things,
To whom the fragile blade of grass
That springeth in the morn
And perisheth ere noon,
Is an unbounded world;

I tell thee that those viewless beings,
Whose mansion is the smallest particle
Of the impassive atmosphere,
Think, feel and live like man;
That their affections and antipathies
Like his, produce the laws,
Ruling their moral state;
And the minutest throb
That through their frame diffuses
The slightest, faintest motion,
Is fixed and indispensable
As the majestic laws
That rule you rolling orbs."

—Shelley.

One should have, therefore, expected to find New Zealand the home of the honey bee, and so it may have been in by-gone ages, and probably the species *Apis dorsata*, the giant bee, now of India. But the same rigorous climate may have chased them away to warmer latitudes, their only representatives being now the small solitary bee that makes its burrows in the roadside. When I was a boy many a delicious feast I have had of honey and bee-bread—and mud—by inserting a straw in their holes and extricating the sticky mess. They, however, can have done little towards satisfying the natural desires of our Dioetius plants, so it is interesting to note that birds stepped in to reap the rewards so richly held out to them. (In passing, I may mention we have another interesting case of this in the weeping willow, another dioetius plant, a native of China, so useful to us for early spring feed. When the Pilgrim Fathers touched at St. Helena on their way out to New Zealand, they brought over willow cuttings from Napoleon's tomb; by accident they brought only the female plant, so every spring we have the widowed willow weeping for its mate, and producing thus for us a flow of nectar.) Thus in the course of ages a race of honey birds was developed, and so we have our beautiful songsters, the tui and the mako-mako—"Eaters of honey, honey sweet of song." In fact, if you look up our early works on bird life, you will find the latter described as of two varieties—one having a red head and one a purple. Closer investigation, however, showed our ornithologists that this colouring was due to the birds, whilst sipping up the nectar of the flax (*Formium Tenax*), getting their heads dyed red by its pollen, and whilst feeding on the fuchsia carrying away its characteristic purple pollen. For our scientific friends are not infallible. When I first went in for beekeeping, I was greatly puzzled by some purple material my bees were throwing out on the alighting board. I sent some to one of our leading professors. After I had posted it

I was reading in the bush, when a mako-mako alighted on a fuchsia, and stuck its head in one of its blossoms. In a flash came into my mind the thought, "That is where my purple material comes from." I collected some, put it under the microscope, together with some from the hives; they were identical. Next mail, to my great amusement, came a letter from the professor, saying it was new to him; was, he thought, the spore of some kind of fungus, and he was trying to germinate it!

It is the inconspicuousness of most of the native flora that makes us under-rate its value. The broadleaf, for instance, is a prolific honey producer, yet I expect few of you have seen its flower, *Pitosporum eugenioides* (or Golden Mapar Tarata of the Maoris); forgive the big names, but remember that most of them are Greek or Latin names that, to a botanist, contain in brief some leading characteristic that helps him to classify them. Thus, *Fuchsia excorticata*—the fuchsia that sheds its bark; and in this instance, "eugenioides" comes from the same root as our word 'eugenics,' for this is a partially dioecious plant—i.e., if you find the pistil well developed, you will find the stamens wanting, or vice versa; is most conspicuous, and at times a great honey producer. *Panax*, or oil-wood, is another; manuka, many beekeepers tell me, is much worked by bees, but is strictly overlooked by mine. Till this season I have never seen a bee on a manuka bush; but after a heavy day's rain, followed by sunshine, I was surprised to find them busily at work on them; then the hini-hini, or white wood, the kowhai, the parsonsias, the passiflora, the supple-jacks, the mühlenbeckias, the hoe-hoe, the ribbon wood, lyalli, the wild Irishman, the Spaniard, all the veronicas, likewise *Myrtis bullata* and *Carpodetus serrate*, the Puta Puta Weta of the Maoris. (Note how they too named trees by some leading characteristic) "Puta-puta-weta"—i.e., the tree full of wood-devils (crickets' holes)—all add their quota in due season. The rata, too, though often so coy to open her lips to the vagrant lover, is not to be despised when she does blossom out:—

"Flowers that with one scarlet gleam
Cover a hundred leagues, and seem
To set the hills on fire."

Then we have the native brambles (*Rubus Australis*), better known as bush lawyers, so painfully known to us all, indeed, who otherwise love the bush.

"That vile twine of prickles fine,
Which if it touch you cuts and chings,
Where'er you pass through briar and
bush."

The bidabid also, whose clever but unwelcome attachment to ladies' petticoats many of you have experienced who have wandered up our beautiful bush tracks. The yellow clematis, whose fragrant scent entices the passing bee to "sup a wee" the native onion too, or the field lily would be a more true and poetic term, the bidamatapo, the currant wood, the senisios, the raioullias, the astelias, the meinulis, and other of our alpine and swamp flora must not be overlooked. Nor must we forget the flowers of our fields—the little yellow clover or trefoil (*Trifolium*—fortunate for you I forget the rest) is very prolific likewise the pelargonium and the geranium each add to the sum total that makes our business pay. The cabbage-tree (*Cardelyne*) gives a great yield in the second or third year, though it is often blamed for thick honey. Our stately pine and totaras too, though giving us little honey, are valuable for their pollen production. Fortunate individuals like Clayton and I no doubt gather nectar from the beautiful mountain daisies (*mesias*), whole fields of which bedeck our mountain sides.

Lastly, our orchids should not be forgotten, if only to bring before you some ingenious plans to bribe our friends the bees to pollinate their species. Take, for instance, *corysanthes*, a small species which grows in our woods. Darwin says "This orchid has part of its labellum lower lip hollowed out into a great bucket into which drops of almost pure water come from two secreting horns which stand above it; and when the bucket is half full the water overflows by a spout on one side. The basal part of the labellum stands in the bucket, and is itself hollowed out into a sort of chamber with two lateral passages. The most ingenious man I ever met never have imagined what purpose all these parts serve. Crowds of humble bees visit the flowers of this orchid, not in order to suck nectar, but to gnaw off the nectar within the chamber above the bucket, doing which they frequently push their head and other into the bucket, and their wings being thus wetted they cannot fly away but are compelled to crawl out by the passage forming the spout, or overflow. The passage is narrow, so that the bee first rubs its back against the stigma, then on the glands of the pollen mass, whose viscid contents cling to its back, thus effecting the cross fertilisation of

next blossom, should they visit another blossom and meet with another involuntary bath. This no doubt on a minor scale takes place with our many and diverse varieties of orchids. In fact, I know of other contrivances in other varieties equally wonderful."

Ladies and gentlemen, it seems very suitable that we should be gathered here to-day, for a former citizen of Christchurch is credited with having first introduced bees into South Canterbury. The story goes that, being very much pestered with the bottles and hearing that the house-fly (*Musca domestica*) drove it away, he went to Christchurch to procure some, returning with a bottle full. This was in the waning days. Arriving at Ashburton, where twenty minutes were allowed for lunch, he sat down to enjoy some. With his usual kindheartedness, he suddenly remembered his flies; they, too, must have some lunch, but with his usual impulsiveness, instead of putting the lunch in the bottle, he let the flies on to the window-panes to forage for themselves. Then came the cry, "All aboard, please!" and a certain excited gentleman might have been seen frantically endeavouring to recapture his flies! However, I believe he eventually managed to capture some, and unfortunately they were of mixed sexes. He was also responsible for the introduction into his district of the Italian bee, about which a good story is told. He enquired of an apiarist what Italian bees cost; being told one guinea, he ordered a dozen to be sent to him; and, expecting it to come as in the olden days, he sent down his wool dray for it. On its arrival back, he had all the family rigged out in overalls and pillow-cases to see the new bees arrive. "Where are they?" says Mr. Tripp, looking into his empty dray. "Here, sir!" quoth the carter, producing with a grin the queen from his pocket.

Many are the kind acts Mr. Tripp has done in this neighbourhood. I remember had not been many days established in my home when up trotted his waggonette loaded up with nut trees, elms, &c., which he planted all about in my bush, and which have since been a great stand-by to my bees, especially the former, for, though being partly dioecious, nuts do not depend on bees for their fertilisation, but on the wind, and therefore have not troubled to secrete nectar as a bribe; yet their catkins produce an immense amount of pollen in anticipation of the spring winds blowing on to the inconspicuous red flowers or catkins, which otherwise will not develop into nuts.

It seems a pity that the early pioneers in this country did not plant out more limes or basswoods, instead of plantations of *Pinus insignis*; but I fear if they had they would have made this country such a land of plenty that we beekeepers would not wish to prepare ourselves for that better land which so surely lies before us.

"This world is the nurse of all we know,
This world is the mother of all we feel,
And the coming of death is a fearful
blow

To a brain unencompassed with nerves
of steel;

When all that we know or feel or see,
Shall pass like an unreal mystery."

"The secret things of the grave are there,
Where all but this frame must surely
be,

Though the fine-wrought eye and the
wondrous ear

No longer will live to hear and see;
All that is great and all that is strange
In the boundless realm of unending
change.

"Who telleth a tale of unspeaking death?
Who lifeth the veil of what is to
come?

Who painteth the shadows that are be-
neath,

The wide winding caves of the peopled
tomb?

Or uniteth the hopes of what shall be
With the fears and the love for that
which we see?"

After a brief discussion Mr. Barker was accorded a very hearty vote of thanks.

DISCHARGED SOLDIERS AND BEE-KEEPING.

Mr. E. W. Sage spoke with reference to statements in a newspaper paragraph, widely quoted, to the effect that on the West Coast of the South Island, between Reefton and the Waihao Glacier, beekeepers could make £8 per week. He said that from what he heard, the district referred to was infested with foul-brood, and he thought it very unfair that anyone should make such statements as those quoted. A picture had been painted that he did not think would be ever realised. During the past two years between seventy and eighty beekeeping cadets had received instruction at Ruakura, and to these men the statements referred to would appeal as very encouraging; so it was, if it could be realised. His objection to the statements quoted was not with the idea of condemning the cadet system; he objected

to the statements because they were hardly a fair picture, and were not a fair thing to bring before cadets and returned soldiers.

Mr. Bray endorsed Mr. Sage's remarks, and said it was not fair to advise men to start beekeeping in a district full of foul-brood.

Mr. E. G. Ward said that he had ten years' experience, and his advice was: Don't expect that you are going to have plain sailing all along the line, because you won't get it.

Mr. J. Murdoch said that he had been invited by the Editor to express his views on the statements quoted by Mr. Sage, and he had done so. Two seasons ago he got 198½ lbs. of honey per colony; from a very few hives, he thought 26. He was not a commercial beekeeper, but if a man could average 200 lbs. of honey per colony he would not do so badly. He was pleased that the matter had been brought up, and if anyone was to blame for the statements quoted by Mr. Sage, he (Mr. Murdoch) was, and he was prepared to take any censure that Conference might like to pass on him.

Mr. Sage said he was pleased to have had the opportunity of hearing Mr. Murdoch's explanation. The fact that Mr. Murdoch had been able to get something like 200 lbs. per hive was no criterion. He did not think that the paragraph quoted represented the true position as relating to the whole Dominion, or to either the South or North Island.

The discussion then dropped, and Conference adjourned.

In the evening a melter demonstration was given by Mr. C. J. Clayton, whose machine did very excellent work, both with the cappings and with solid combs cut out of the frames. The separator is very ingenious and effective.

Mr. Clayton was given a very hearty vote of thanks for the trouble he had taken to give interest to the proceedings of the Conference.

Mr. G. Simpson gave a demonstration of his disposal of cappings by pressure, the honey being removed from the cappings by being placed in a very strong press similar to a wax-press, but much heavier. The cappings come out in a solid lump and practically dry.

Mr. Simpson's remarks were followed with great interest, and the thanks of the members were expressed to him.

Mr. J. Rentoul gave his system of swarm control, and as the members wished for a permanent record, he was asked to put the system in writing for the Journal. To this Mr. Rentoul promised to do.

Mr. A. R. Bates gave a system of wintering bees now being practised in Taranaki by prominent men, which, briefly described, is shutting down the bees on six frames by the use of a division-board. They are kept in this state until the spring, when they are fed with about 10 lbs. of sugar syrup. This treatment retards heavy brood rearing in the early spring, which in Taranaki is undesirable, as the clover flow does not come on until about Christmas.

Mr. Bates made it clear that he was not advocating this system for the whole of New Zealand, but simply putting forth the information for the general interest.

Mr. W. B. Bray gave an instructive address on the use of escape boards, and the successful use of them on hives without queen excluders.

The meeting adjourned at 10 p.m.

SECOND DAY—THURSDAY, 10th JUNE

The Conference resumed on Thursday, 10th June, at 10 a.m.

APIARY BOUNDARIES.

A paper on "Apiary Boundaries," by Mr. R. H. Nelson, was read by Mr. Ireland, who apologised for Mr. Nelson's absence, due to his apiary having been destroyed by fire. The paper was as follows:—

At the last Conference the consensus of opinion amongst beekeepers present was that something in the way of apiary site control should be tackled by the National Association, otherwise Mr. Ireland's motion would never have been carried. Minutes of previous Conference will show that this is correct.

I had heard it stated often by beekeepers that an apiarist had a moral right to his location, bee flight taken as one mile and a half round his apiary. To obtain the opinions of beekeepers on this important subject, I determined to circulate the most prominent beekeepers the world over.

[Circular.]

"Sir,—Would you kindly give me your opinion on the following questions:—

1. Has an apiarist, who is running a commercial apiary, a moral right to his location—that is, bee flight taken as 1½ miles from said apiary?

Do you think it is morally right for any other commercial apiarist to dump an apiary within three miles, two miles, or one mile from an established apiary?

Do you object to having your opinion—
(a) Published in the N.Z. Beekeepers' Journal; or (b) Quoted from the public platform at Beekeepers' Conference?

As this subject is rapidly becoming of vital importance to the beekeepers of New Zealand, I am asking as a favour the opinion of the most prominent beekeepers all over the world."

The people chosen were, I should imagine, the representative bee farmers of their respective countries, and their opinions were undoubtedly of great value:—United States, The A. I. Root Co., Dadant & Sons, and Dr. Miller, of Marengo; Canada, Mr. J. L. Byer, of Markham, Ontario; Mr. Holterman; England, Mr. Herrod Hemsall; Australia, Major Shallard; New Zealand, Mr. James Allan and Mr. I. Hopkins. As the answers to these questions are here and can be read, I need not quote them. Dr. Miller was very ill at the time my circular reached Marengo, hence his silence. Mr. Isaac Hopkins has not answered at all.

Mr. J. Allan, President of the National, is the only one who answers the first question in the negative. The second question you will see he has side-stepped. Mr. Allan tells us in his reply that he has been beekeeping for 36 years, &c. The Dadants have been beekeeping for three generations, and they have no difficulty in answering. There is a manly ring in Mr. Byers' reply which is foreign to the puerile arguments of the bee pirate. I quote him:—"Self-respect and self-interest prevent us from doing so. Lack of the first qualification would prevent me from looking my neighbour beekeeper straight in the face."

Mr. President and gentlemen, it was with a keen sense of responsibility and a desire to do well, to frame some measure that would control the unscrupulous person and give even-handed justice and right to every bee-farmer in New Zealand, that was the supreme desire of your Committee when they met in Wellington.

Your Committee, since the publication of the six clauses that were then drafted, have, instead of receiving constructive and friendly criticism, been subjected to the most idiotic ravings that it has ever been my bad luck to read. It really matters little to anyone whether the Baines' or any other clauses are put on the Statute Book so long as the said clauses cover the ground properly. I venture to state that the

Baines' two clauses do not. As no doubt Mr. T. W. Kirk will be present, he no doubt will explain why better than I can here.

Mr. President, may I suggest to you that it would have been advisable that at least one of your Committee had attended the Executive meeting in Wellington and explained to you and the Executive just what those six clauses meant. It evidently could not be done through the columns of the Beekeepers' Journal. It was my intention after the Executive meeting to explain the deficiencies in the Baines' two clauses, when I found that Mr. Baines refused me publication; and he tells Mr. Smedley, of Te Awamutu (Journal April 1st): "This matter is still open."

The longest way round seems to be the shortest way home here. If one of your Committee had attended the Executive meeting, or the Journal been open for a free and open discussion of the whole position, it may have saved some time and bother at this Conference.

Mr. President and gentlemen, from correspondence that I have received since this discussion was commenced in the Journal, I am convinced more than ever that legislation is necessary in New Zealand to control apiary sites. Foul-brood is the bogey or herring just at present. What does this read like?

Re foul-brood, a beekeeper, not 1,000 miles from Christchurch, approached me. "I hear you have had some people dumping bees close to you, Bob. Is that so? I answered that it was so upon two occasions. "Well, I'd have fixed them," said he. "I'd have given them a dose of foul-brood; that would have settled them." And he meant it. He seemed to reason it out thus:—If this fellow is going to put me out of this location, I am justified in taking whatever measures I think fit to put him out also. Just so, and some of our prominent members say that we don't require legislation to control people who evidently cannot see straight.

Now, as your Committee have done their duty to the National to the best of their ability, and their efforts have been received by the heads of this Association with contempt and scorn, I can go no further, for the present, at any rate.

In conclusion, I would take off my hat to Mr. T. W. Kirk, a gentleman in the fullest sense of the term, whose unflinching courtesy to all has been a wonder to us.

R. H. NELSON.

Mr. Allan's Reply.

"I have your questions. I have been a beekeeper for 36 years, and have risen to the high position of President of the National, but you have got me beat. To answer shortly to the first, I would say, No. There are places in Europe where there are 1,000 colonies per square mile. (I have read that this is so in parts of Holland.) Now, your radius of one mile and a-half might easily in some districts support more than 1,000 colonies, and you might only wish to keep ten colonies. Would you refuse to let others who held the freehold of perhaps more than half of it keep bees also? The thing is monstrous. With regard to your second question, you would require to give more particulars as to district before I could answer. As I have all along said, I do not like monopoly in beekeeping, so much so that I would prefer to sit very tight on the man with out-apiaries. My opinions are well known, but you can use them as you like."

A. I. Root Company's Reply.

"We have received a carbon copy of your letter of August, 1919, asking certain questions on the matter of one beekeeper locating an apiary near the bees belonging to another. As you evidently have copies of your questions, we are answering them by numbers.

No. 1.—If an apiarist has been in the field for a year or more, or before anyone else discovered it, he has a moral but not a legal right in this country to a location within a mile and a-half to two miles of his apiary. The range of bee flights vary in different localities. On level land, where the ground is covered with shrubbery or trees, bees will not fly as far as they will upon naked land, or upon high ground where bees can fly across a valley or a body of water. In such cases they will go sometimes three or five miles, but on level land they will rarely go beyond a mile and a-half, providing it is covered with trees or shrubbery.

No. 2.—Two miles would be safer, and three miles better yet. One mile would be altogether too close. Ordinarily we should say that other bee-yards should not be located closer than three miles. This would give a range for the bees of both yards of a mile and a-half.

No. 3.—You are at liberty to use our opinion in any way you see fit."

Mr. Byer's Reply.

"Your letter to hand this a.m. Your queries re the moral right of a commercial beekeeper to his location (acquired by

priority rights, I presume) suggest to my mind some problems that are difficult to solve. We are commercial beekeepers, I suppose, as we depend almost altogether on the bees for our living, and we have bees in out-yards in four different counties in Ontario, naturally we know what it means to have others place hives near our yards. As to our opinion on this phase of the question, I would say we would not think of placing hives near an established apiary—self-respect and self-interest prevent us from so doing. Lack of the first qualification would prevent me looking my neighbour beekeeper straight in the face; and secondly our purses would suffer as well, as overstocking means less returns from capital invested in bees. But some intricate questions come up in this line of "moral rights" that I confess are hard for me to solve. For instance, I establish an apiary in a locality where there are few or no other bees. A farmer who has lived there and owned land at that place for many years gets a colony or two. He becomes more interested in bees (possibly from seeing results we are getting), and he gradually increases his knowledge of bees, and his colonies as well, till finally he has a large apiary, and the location is overstocked. This is not fiction as it has happened more than once. The farmer was there long before my bees were there. Have I a moral right to say he should not have increased his bees on his own holding of land, while I have been renting a plot only large enough to accommodate our bees? But in so far as the principles of the questions are concerned speaking in a general way as between commercial beekeepers, there can be only one answer, and from what I have said the question you can easily see how I would answer it.

You are at liberty to use what I have said in any way you may see fit, and if desired to further amplify any statement I have made, I would simply say that the Golden Rule is a mighty fine thing for commercial beekeepers to follow in their dealings one with another; it will prevent overstocking, bad feeling, and a host of other ills incidental to humans better than any other thing I can think of—verily a universal panacea.

While we are busily getting our bees ready for a severe winter—we always get a severe winter here—you, on the contrary I suppose, are getting ready for a crop of honey; quite a contrast.

With fraternal greetings from one on the other side of the earth."

Mr. W. Herrod Hemsall's Reply.

Mr. W. Herrod Hemsall (British Bee Journal) answers as follows:—"Question No. 1. Yes, bee flight two miles from apiary. 2. No. 3. No."

Major Shallard's Reply.

Major Shallard, N.S.W., Australia, replies as follows:—"No. 1. Absolute moral right, which was and is scrupulously observed by all old beemen. At the same time the sites must be fully stocked. 2. No beeman has any right to trespass upon another, and should not go closer than three miles."

Mr. C. P. Dadant's Reply.

Mr. C. P. Dadant (American Bee Journal) replies:—"Question No. 1. I believe he has. 2. Not short of three miles, unless the apiary is small and does not cover the field. 3. Not the least objection."

The discussion, in its early stages, dealt with the moral right of the owner of land to start keeping bees, despite the fact that an apiary existed within a mile and a-half.

The President, who upheld the landowner's moral right, referred to the Edendale district, where, originally, the land was sour. The farmers limed the land, with the result that it grew clover the like of which was not grown elsewhere in the Dominion. In Holland he was told that similar country could carry 1,000 hives to the square mile.

Mr. Ireland said that he could not understand why the President held divergent views from those expressed by the principal beekeepers of the world.

Mr. L. Irwin said that though his Branch was in favour of Mr. Baines' proposals, he himself had a great deal of sympathy with Mr. Nelson; but the Nelson party had been unfortunate in its advocates. He thought that legislation might be passed to prevent "dumping."

Mr. Sage was of opinion that the owner of an established apiary had no right to object to a newcomer starting an apiary in the same district.

Mr. Ward, quoting an opinion expressed by Mr. Byer in a letter on the subject, thought that the application of the Golden Rule would solve the problem. He did not think that legislation would do much good.

Mr. Bray, to test the feeling of the Conference, moved: "That Conference proceed to the next business." He thought that the matter under discussion was impossible of solution by legislation.

Mr. P. Martin seconded the motion, which was agreed to.

The President then submitted the following remit from the Executive on the subject of apiary boundaries:—

"We as an Executive agree that the solution of this difficulty as put forward by Mr. F. C. Baines in the National Beekeepers' Association Journal for December, 1919, is the best yet given, and we suggest that the National Association in Conference assembled should pass resolutions to have these clauses embodied in the Apiaries Act:—

"Clause 1.—The owner of ten hives or more can become a licensed commercial apiarist within the meaning of the Act if he so desires, on payment of 2/6 per annum.

"Clause 2.—No person shall be allowed to start or establish an apiary on any land other than his own residential property, either leasehold or freehold, without the consent of the Apiaries Division of the Department of Agriculture."

He explained that these clauses were only rough drafts; if agreed to, they would be properly drafted to give effect to the principles they embodied.

Mr. Baines said that, as they knew, he had been against legislation all along. Considering every phase of the question, it seemed impossible to solve it that way. He recognised, however, that it was "jolly hard luck" for a man who had established an apiary to have another start in his vicinity. He read an article on the subject under discussion from the December (1919) issue of the Journal.

Mr. Ireland said he had no objection to Clause 1. Under Clause 2 he would be prevented from keeping bees, as he did not reside on his apiary site.

It was explained that the clause would not be retrospective in its operation.

Mr. Bray moved: "That Conference proceed to the next business." He said that there was plenty of room for everybody in the country, and there were many untapped sources of honey.

Mr. Irwin seconded the motion.

Mr. E. Simpson moved: "That the Apiaries Act be amended by including Clauses 1 and 2 as above."

Mr. Ireland seconded.

Mr. Bray's motion was negatived on a show of hands.

Mr. Simpson's motion was agreed to.

The President said that Mr. Campbell informed him that if the Department approved of the clauses when they were submitted, they would be drafted so as to give effect to the intentions of Conference.

By acclamation a vote of thanks was accorded the Committee which had served on the question of apiary boundaries.

A vote of sympathy was accorded Mr Nelson in respect to the destruction of his apiary.

Mr. Ireland briefly acknowledged the vote of thanks to the Committee.

PREVALENCE OF FOUL-BROOD.

Mr. R. W. Brickell brought up the question of the control of foul-brood and the proper administration of the Act, and stated that a self-appointed Committee had gone into the matter, and would submit a resolution on the subject. With permission he called upon delegates from different parts of the Dominion to give their experiences regarding foul-brood.

Mr. L. Irwin said that foul-brood was still to be found in every corner of Southland; he did not know a commercial beekeeper who did not have foul-brood close to him.

Mr Watt (Mataura) said the disease was in his district to a good extent.

Mr. J. Murdoch said that the southern part of Westland was pretty free; the northern part was still bad in parts.

Mr. A. H. Davies (Hamilton) said that he had been a local inspector. Foul-brood was to be found all round the Waikato.

Mr. Simpson (South Canterbury) said that he was also a local inspector. When he first went to the district the disease was rampant in every hive in the district; it was still very bad.

Mr. Johnston (Rangiora) said that he had the disease in his district.

Mr. Bray said that some parts of Banks Peninsula were clean; other parts required cleaning up.

Mr. A. R. Bates (Kaponga) said that his district was getting cleaned up to a great extent. The disease was not nearly so bad as it had been.

Mr. Shepherd (Hastings) said that foul-brood was very, very bad, and had always been bad. He emphasised the necessity for the inspector's first visit being followed up.

Mr. Martin (Nelson) said that foul-brood was in existence in the Motueka district.

Mr. Goodman (Otago) said that six years ago when Mr. Earp went through the district, it was almost impossible to find a clean colony; there was comparatively none now.

Mr. Ireland (Ellesmere) said that during the past five years his apiary had been entirely free from the disease; the same applied to his neighbours.

At a later stage in the proceedings, Mr. Brickell moved, Mr. Clark seconded, and it was unanimously agreed—

“At a largely attended Conference of beekeepers of the Dominion, representative men stated in no uncertain terms that, of their own knowledge and personal experience, the Apiaries Act as at present administered has not accomplished the primary object for which it was placed upon the Statute Book. It is certain that foul-brood—the scourge which costs the beekeeping industry thousands of pounds in an attempt to combat it—is rapidly on the increase, and in a large measure to understaffing of the Department which has to administer the Act. The annual loss in capital and production due to the ravages of the disease runs into many thousands of pounds. The Conference submits that in view of the necessity for increased production, the loss mentioned is a national one, and all reasonable means must be taken immediately to stop the loss. We submit—more, we demand as a right—that all the provisions of the Apiaries Act shall be immediately put in force; that a Chief Apiaries Instructor be appointed, whose duties shall be to see that the Act is carried out. That a sufficient number of field officers shall be appointed to assist him in carrying out his duties; that the duties of these field officers shall be the elimination of disease in the district to which they are appointed. That a copy of the foregoing statement and resolution be placed by deputation, consisting of the President, Secretary, and others, before the Hon. the Prime Minister, and that a copy with a covering letter be sent to every member of Parliament.

“2. Should the Government be unable to grant the requests herein contained, the National Executive and the

Board of Directors of the H.P.A. are hereby appointed a Committee to take such steps as may be necessary to have the Apiaries Division of the Horticultural Department created a separate division under its own Director."

GRADING REGULATIONS.

Mr. C. F. Ryland brought up the report of the Committee to which matters relating to grading were referred. He stated that the matter was discussed in conference with Mr. Campbell and the three Government honey graders, and it was realised by all that some alterations or additions were required to the system of grading to enable it to become a little more elastic to meet the continually changing conditions by world-wide commerce. Other than that nothing very drastic was necessary. They came to the conclusion that the grading of honey and inspection for foul-brood were equally necessary, and equally essential for the development of the honey industry of the Dominion. It was important that grading should be done promptly, and that inspection for foul-brood should be done all the while. It was recommended that "water-white" should be added to the grading classes, and the Department be asked to adjust the regulations accordingly; that with regard to coping with foul-brood, further inspectors should be provided by the Department for inspection purposes; that graders' duties be adjusted to enable all honey received to be graded promptly after receipt at grading stores.

Mr. Campbell said that the Committee had a very useful discussion, covering much that the recommendations did not fully cover. The sum total of the whole business was that the beekeepers, the National Association, and the Department should get together on every occasion, with the view of removing any anomalies that might exist in connection with the work being carried on, and of placing matters on a satisfactory basis in the interests of the industry. The Department was quite willing, so long as the industry was safeguarded, to meet any proposal so long as it did not lower the standards built up in the past.—(Applause.)

On the motion of the President, seconded by Mr. Jacobsen, the report was adopted, and a vote of thanks was accorded the Committee.

USE OF EXCLUDERS.

Mr. Baines opened a discussion regarding technical work in the apiary by reading a paper on

"QUEEN EXCLUDERS: AN ASSET OR A NUISANCE."

Those of you who took the Journal in December, 1916, will remember an article by Mr. R. Gibb, of Menzies Ferry, on how he secured eleven tons of honey from 100 colonies. In that article he made the following statement:—"Now, I know I shall rub somebody's hair up the wrong way when I state that I have never yet found a blocked brood-nest where queen excluders are used; and as I run the whole season with three or four swarms, and some seasons none at all, the man who says they encourage swarming does not know what he is talking about."

As Mr. Lenz, with whom I first gained experience in beekeeping, and who at that time was the largest and most successful beekeeper in the country, could not work his bees successfully with them, and my one and only attempt with their use was a miserable failure, I felt this statement was rather a sweeping one, and wrote the Journal on my experiences.

Mr. Gibb replied fully, giving his method of working, and after summing up said:—"No, the trouble is that you northern men's education in the use of excluders has been sadly neglected."

At the time that was written, I thought we could very well neglect the tuition; but at this time I am inclined to think there was a great deal of truth in it.

Although I did not make a successful use of queen excluders, I always felt, when taking off honey, how very much nicer it would be if the supers contained combs of honey only, instead of having brood scattered about them, often into the second and sometimes the third super; and knowing that others were enjoying this boon by the use of excluders, I set about educating myself to their use by putting them on a few hives three seasons ago. That happened to be a very peculiar season, as there was very little honey about, but the condition of the hives with the excluders on indicated that it was easily possible to use them to advantage provided one was careful to judge when the hive was ready for the division by the excluder. Last year I again used them successfully on about twenty-five hives, but the epidemic coming along just at the busiest time in the apiary, I was not able to give the necessary attention, and the results were not so good as they would otherwise have been.

During the season just ended, I used excluders on every hive, and although it was not a good season, as we did not have the

equivalent to 12 hours' rain in four months, I am convinced the queen excluder is a very valuable asset. It would perhaps be of interest to give a rough outline of my work last year.

My first inspection was during the first week in August, when I found the bees had wintered well. Colonies showing poor queens were marked and re-queened, and by assisting the weaker from the stronger, by the middle of October they were all in an average good condition, with a fair flow of honey coming in.

On 24th October I clipped the queens' wings, and worked the hives on the Demaree plan by placing three frames of brood and queen in the brood-chamber, filling up with empty combs, placing on excluder, then super of empty combs, and on top of these the combs taken from the brood chamber. I do not think it advisable to place the queen below with only one frame of brood. I have found in some cases the bees have neglected the old queen and put all their energies in the upper super raising queen cells.

From this manipulation till I had extracted in February I did not once again look into the brood chamber; neither did I have one swarm the whole season.

Now, the chief advantage in using excluders is when you come to extracting time, and can thus use escape-boards, with a surety that your supers will be cleared of bees. I am inclined to think that this advantage alone is worth taking whatever risk there is in using excluders. I have 24 escape-boards, and to put these on overnight entails about three-quarters of an hour's work. The convenience next morning of just removing the cover and placing the super of honey on your barrow is very great indeed; apart from the saving of time, there are the great advantages of the bees all out of the way, and no smoke necessary, thereby eliminating the chance of tainted cappings; the absence of the possibility of killing or at least injuring the queen; and the very great comfort of having practically no bees in the extracting room.

I reckon it used to take me at least five minutes at every hive under the old system, and one was busy with the smoke and brush the whole time; and even so a great number of bees were still on the combs, a certain number were crushed or daubed with honey, and each frame had to be treated separately, entailing a great deal of labour and lifting. Now, a lift

with the hive tool and the job is done. use the screen wire escape-board, made out of the screens used for transporting live bee-hives.

When the extracting was over, I then made an examination of the brood-chambers, and found in every case that instead of the combs being blocked with honey there was evidence that practically the whole of the combs had been in use for brood-rearing only, and there was far less little honey in them to winter the bees unless we had an autumn flow. Owing, I suppose, to the dryness of the season, there was practically no honey at all this fall and it was necessary to retain all the spare combs of honey contained in the first supers for feeding. Therefore, I am bound to say that my experience this year is in accordance with the statements made by those who have championed the use of excluders—that the use of them does not mean honey-blocked brood-chambers.

There are many experienced beekeepers who do not look kindly on the general use of this much-discussed appliance, but even they will admit the great utility of them for raising queen-cells, as the best possible results are obtained when a set of grafts are placed above a strong colony.

You will judge from my remarks that I do not pose as an experienced user of the appliance, but have read this paper just to open the discussion. There are Messrs. Rentoul, Ward, and others who have been using this appliance for years, and I hope my few comments will prompt them to give us all the benefit of their experience.

My opinion to-day is that queen excluders are a great asset to the beekeeper.

An interesting discussion followed, the majority of the speakers testifying to the usefulness of excluders. Mr. Rentoul, for instance, saying: "If I could not use excluders, I would give up the business altogether." Messrs. Ward, Clayton, Jackson, and others spoke to similar effect.

Mr. Sage said that he had used the excluder, but eventually found that he could do much better without it. When a beekeeper got into business in a big way, an excluder was just one thing more to handle, and the sooner he got rid of it the better.

Mr. Bray said that he managed quite well without it.

A hearty vote of thanks was accorded Mr. Baines.

HONEY-PRODUCTION INDUSTRY.

Mr. J. Rentoul read the following paper:

THE HONEY PRODUCTION INDUSTRY.

I wish shortly to make a few remarks on the honey production industry, principally to compare the treatment meted out to it by the Government as compared with the way other industries are treated.

Every year representatives of the Government and heads of the Department visit the Conference, and quote figures showing the progress of the industry, and pass complimentary remarks generally on the subject; but that the industry progresses is entirely due to those engaged therein. Not only is the industry not nursed and pampered as some of the other producing industries are, but in some respects it is penalised. The figures that I will quote presently will show you that it is the only form of production that is not assisted by concessions, but is, on the other hand, as I have said, hampered by excessive charges, not to mention neglect; and why this should be so is difficult to understand. The industry of honey production performs a dual benefit, and should really rank as of considerable importance. It produces a valuable food product that is otherwise going to waste—a product that can and should to a considerable degree replace sugar, which must be imported. And in this connection it would only be reasonable to expect that the Government would assist in popularising the use of honey. It is the ideal sweet for children, and its use in confectionery, for instance, in the place of such stuff as glucose would be a decided benefit to the health of the rising generation.

Besides producing a valuable food product, the industry is directly beneficial in improving the pastures of the country. The fertilisation of clover is an important matter in general farming, both improving the pastures and at the same time benefiting the soil. So much is this the case that the more intelligent among the farmers not only welcome the establishment of apiaries in their neighbourhood, but in some cases will assist the beekeeper by paying part of the cost.

I think it will be admitted that the industry has exceptional claims for, at least, fair treatment, if not for some of those concessions which have been extended to other industries in the early stages of their existence, and, indeed, are still extended to them.

Let me first take the matter of railway rates applying to honey and material used

in beekeeping, and compare them with the rates charged to other produce and material. I will take the rate for comparative purposes for 100 miles, and will leave out the 10% and 10%. Honey is charged 26/6 as against butter 14/6, fruit 11/9, grain 9/8. Honey takes much less space than butter, and brings a much less price per pound. A case of fruit can be sent anywhere on the rail for 8d. Cases in shooks for fruit-growers, free; for honey producers, £1 12s. 1d. Bees are charged at the highest rate—viz., Class A, 49/4. This is an important matter, as it practically bars a beekeeper when the season is a failure in his own locality of taking advantage of a good season in another locality—a thing that could be frequently done in New Zealand.

These rates are obviously unfair to us, and although representations have been made time and again, both to the Manager of Railways and to the Minister, nothing has been done to rectify the matter. Compare this with the treatment received by the dairying people. For example, milk or cream is carried at 1½d. per gallon per 100 miles. This is a bulky product in heavy cans, the weight of which is not included in the charge. It is carried in the vans of passenger trains. I noticed a paragraph in the *Lyttelton Times* the other day, so I brought it with me. It reads:—

“Mr. G. W. Forbes, member for Hurunui, has received the following letter from the Minister of Railways: ‘With further reference to your letter of the 17th ultimo regarding the question of farmers being required to do the loading of their cans of cream, I have the honour to inform you that cream is carried over the railways at very low rates, one of the conditions being that the loading and unloading shall be done by the owners. The rates charged are quite unremunerative, and if the loading were undertaken by the Department it would be necessary to increase the rates, as in many cases additional assistance on the trains would have to be provided. I might mention, however, that statistics bearing on the subject are at present being prepared with a view of providing some means of meeting the requirements of the dairy farmers in the direction indicated as far as is found practicable.’”

You will notice that an effort is to be made to meet the dairy farmers' requirements in this matter. There appears to be still room for further liberal treatment here, but when the honey producer asks for purely a normal rate—the same rate as butter—the matter is ignored.

There are a few more concessions that the other farming industries receive. Farmers get lime delivered free for 100 miles; grass-seed returned free from the cleaning mills. If a fire sweeps the country, he gets grass-seed supplied free. If an apiarist is mopped up at the same time, he can make shift as best he can. When feed is scarce in bad seasons, he gets his fodder carried free; the beekeeper has to stand the racket himself, pay good money for his bee feed, and the full railway rate. The fruit-grower has a guarantee of 1d. per pound on all fruit exported. I think I am right in saying that if the honey industry had been nursed in this manner, it would not have been the least among the industries.

Now, with regard to other matters, we have an Apiaries Act and grading regulations, and I believe the Department carry them out as well as the money at their disposal allows. At any rate, the beggarly salaries paid to graders would indicate an effort to make the money go as far as possible. But the position to-day, as far as the control of disease is concerned, if improved at all, is mainly due to commercial apiarists spending money that would be used for the development of their business in buying up disease-infected hives in their neighbourhood to get rid of them.

As for grading, the staff at the command of the Department is so small that the delays occurring tend to make the regulations a hindrance rather than a benefit. During the war the Government exercised itself in making arrangements with the Imperial Government that were highly to the advantage of other producers. But, like Cinderella, the honey industry was left out as usual, although the fact that the Imperial Government, on the representations of the agents of the Honey Producers' Association, put honey on the first priority list just before the armistice was signed, showed that something might have been done in the matter, and that the Imperial Government recognised the value of honey among the foods required by them. If the Government had taken the matter up when they dealt with dairy and other produce, the claims of honey would have been recognised earlier. Our absolute failure to get shipping in 1918 might thus have been obviated, and some £50,000 saved to the producers and the Dominion. While other producers, through this trying period, were reaping a rich harvest owing to the care of the Government, nothing stood between the honey producer and disaster but the organisation built up by their own efforts. I consider that the National Association has been too

modest in its claims for a square deal. The fact that the honey producing industry is ignored by the Government and Parliament generally can only be due to a want of knowledge of its condition and its possibilities. I would here suggest the Executive draw up a comprehensive memorandum which should be sent to every member of Parliament dealing fully with the conditions under which we work, giving statistics showing its possibilities, and pointing out what should be done to get the best out of the industry.

I will make a few suggestions. The matter of railway rates should be brought into not only with regard to honey, but rates on bees, cases, tins and supplies. The matter of eliminating foul-brood. Assistance in obtaining better grading standards. Assistance in obtaining suitable apiary sites. At the request of this Association, the Lands Department for a time set apart sections for apiary sites in land cut up by them for settlement. But this quite failed to realise what was required in this respect, neither did they reserve these sections for the sole right of beekeepers, but allowed anyone to obtain them. The idea in setting these sections apart was more for future than present requirements. New land is not always suitable for beekeeping, but may become so later on, and the idea was to hold these sections in reserve, or let them temporarily till required. It is often difficult to set apart apiary sites in suitable localities, and besides setting apart these sections already mentioned, the Government should be asked to assist apiarists by buying sections and leasing them, or else assist the beekeeper to buy, as they assist other farmers.

These are some of the matters that should be put before members of Parliament, and I am sure their fair-mindedness when they know the facts will enlist their support.

The President said that they had about as much compressed wisdom in Rentoul's paper as in any paper read before Conference. Railway rates when honey were fixed when honey was being produced in large quantities, and the rate was made high on that account. Things had now changed, and there was no reason why honey should be on a different basis from butter, milk, or other produce. They should make a very determined effort to get rates reduced. They had waited on Sir William Herries, who was to be put down with fair speeches, and nothing in them. They proposed that South Island honey should be carried

Timaru, and that would double the railway revenue; it would be killing if they had to pay present rates.

After discussion, it was decided, on the motion of Mr. Baines, seconded by Mr. Jacobsen: "That the President, Vice-President, and Secretary of the National Beekeepers' Association, and the manager and the Chairman of the Honey Producers' Association be a permanent Committee to look after the political interests of the industry."

The President: The Committee's first business will be to try and get railway rates on honey reduced.

A vote of thanks was accorded Mr. Renoul.

VARIOUS MATTERS.

The President read a letter from Mr. T. W. Kirk, Director of the Horticultural and Apiaries Division, expressing regret at his inability to be present.

A letter was read from Mr. I. Hopkins suggesting a competition in respect of comb and capping machines.

The President said that he had been asked, in connection with the railrage of honey and the proposal to send all South Island honey to Timaru, to mention that Southland members desired to know the attitude of Conference regarding freights. At a previous Conference, reference had been made to the possibility of pooling freights.

THE ASSOCIATION'S USEFULNESS.

Mr. C. E. Ryland gave a lengthy and interesting address on "How the Usefulness of the National Association can be Increased." He said that the geographical location of the Executive of the Association prevented frequent meetings being held, and from his point of view one of the most desirable things was that meetings of the Executive should be held as often as possible. The location of the secretary hindered prompt action in urgent matters, and prevented, to a large extent, co-operation with the H.P.A.; but Mr. Baines was without doubt the best possible man for the position of secretary.—(Applause.) Apart from that, the position of secretary of the Association should be centralised. He mentioned, in connection with Major Norton's visit to the Dominion, that an endeavour was made to postpone the sitting of Conference for a fortnight, but owing to the delay in getting replies from members, no action in that direction had been possible. What was the solution of these friendly criticisms?

The first desirable thing in connection with the Association was the formation and adoption of a definite written platform on progressive lines. "I do not suggest that you should join the Labour Party," Mr. Ryland said jocularly, "and publish a platform in John Norton's 'Truth' or the 'Maoriland Worker.'" The adoption of a definite written programme would mean that each member of the Executive and each member of the Association would know exactly what the programme of the Association was, and what the Association was striving to do. Mr. Ryland quoted from the February (1920) issue of "Gleanings" to show what beekeepers in the United States are doing in the way of organising nationally with a definite platform. The advantage of a definite platform, he said, was that the whole force and knowledge of the Association could be directed more effectively than if action was taken haphazardly. If the secretary were given certain definite executive powers, it would mean a tremendous saving of time and expense; the secretary knew the mind of the Executive, and was prepared to take reasonable action when necessary, knowing that he would have the support of the Executive. Failing the location of the secretary in a central locality, a small Executive of three, under the main Executive, was suggested. Mr. Ryland suggested the following as the Association's permanent policy:—

1. Increase in the consumption of honey in the Dominion.

An advertising campaign, similar to that undertaken by the H.P.A., was suggested. It was estimated that in 1919 about £5,000 was spent in shipping charges in connection with the export of honey. This would be saved if a local demand were created.

2. The appointment of a Chief Apiarist.

Mr. Ryland said that Conference had already discussed this.

3. Higher salaries for apiary instructors.

This was a matter Mr. Ryland said, of great importance to the industry. Unless salaries were increased they would not be able to keep men of experience at the present maximum of £295 per annum. It was at present difficult to get men to put tins of honey in a case and nail the cases down at that money; many unskilled men were receiving more; it was ridiculous to think that the matter should be allowed to stand as at present; the Association must move in the matter. He quoted, for comparison, salaries paid by the Government for experts, as follows:—Hemp grader,

£345 per annum; dairy grader, £400; grain grader, £350; inspector of stock, £350. Honey graders did work of equal importance.

5. Assistance to honey producers.
6. Loans from the Government.

There should be an Act in connection with the honey producing industry similar to the Fruit Preserving Act of 1913, under which the Government should advance reasonable sums where-with to build depots for the blending of honey, and for the advancement of the industry generally.

7. Increase of membership of the H.P.A.

An endeavour should be made to get every beekeeper in the Dominion to become a member and supporter of the Association. By participating in the co-operative movement, all bee-keepers would obtain better prices.

8. Eradication of foul-brood. Necessity for a greater number of Government inspectors.

Local inspectors had proved unsatisfactory. There were in the Dominion about 9,000 people who kept bees and bred foul-brood "for fun" and for a little honey—if they could get it. The time had arrived when the problem of foul-brood should be looked at mathematically. It was not a fair deal that the commercial honey producer should be robbed of his honey by the existence of a single hive in his district "owned by a man who is not seriously producing honey." To meet the expense of additional Government inspectors, the Conference should request the Government to impose a tax of £1 per annum "upon every person keeping bees in the Dominion"—(applause)—the money raised by this tax to be utilised in the payment of inspectors to eradicate foul-brood, any surplus to be devoted for organising and developing the honey producing business. It might seem very terrible to some people to be called upon to pay £1 per annum for the privilege of keeping bees, but they wanted every beekeeper in the Dominion not to be content to have a single hive and breed disease, but to go in for the business seriously and properly. The tax would eliminate the disease, and turn "hobbyists" into serious beekeepers. A similar tax was imposed on nursery-men and orchardists.

Concluding, Mr. Ryland said he put these suggestions forward with some diffidence: they were his own opinions, gained from

a pretty close study of and a good deal of thought about the industry.

The President said that they had listened to a long and interesting address; but they had to look for practical results. Mr. Ryland's point as to the difficulty the Association was under in doing anything was well taken. It was possible that the difficulty might be overcome to some extent by enlarging the powers of the Standing Committee. He moved: "That the Standing Committee, which consists of the President, Vice-President, and Secretary at the time being of the National Beekeepers' Association, and the Chairman and Manager of the H.P.A., take up and deal with all matters connected with the industry."

Mr. C. A. Pope seconded the motion which was agreed to.

On the motion of Mr. W. Watson, seconded by Mr. T. A. Clarke, it was unanimously decided:—"That this Conference requests the Government to place an annual tax of £1 on each person keeping bees in the Dominion, such tax to be used in the payment of additional inspectors for the prevention of foul-brood and in departmental and instructional purposes and appointments."

On the motion of Mr. A. R. Bates, seconded by Mr. W. B. Bray, it was agreed:—"That the salary of an apiary instructor or honey grader be raised to at least that of a dairy produce grader." It was decided that a copy of this resolution should be forwarded to the Public Service Commissioners.

FIRE BLIGHT EMBARGO.

Mr. T. A. Clarke brought up the subject of the rumoured intention of the Government to gazette regulations prohibiting bees and queens being removed from the Auckland provincial district owing to the fear that they would carry fire blight to other districts. He moved: "That the Conference demands that before regulations are gazetted prohibiting the removal of bees and queens from the Auckland district, the whole of the reasons for such action be placed before the Committee set up by Conference."

Mr. W. Watson seconded.

In the discussion which ensued, several speakers questioned whether it had been proved that bees conveyed fire blight.

Mr. W. E. Barker advised caution, and pointed out that fire blight was a most serious thing from the fruit-grower's point of view.

Mr. Campbell said that it was proposed to act on a rumour. He could not confirm that rumour; it was a matter for Cabinet or for the Executive Council; he was not in a position to say whether the rumour was correct.

After further discussion the motion was agreed to, and Messrs. Clarke, Sage, Baines and Ryland were appointed a Committee to approach the Government in the matter.

Conference adjourned, and in the evening a supper and social gathering was held in the Cadena Tea Rooms, the function being attended by over 90 delegates.

THIRD DAY—FRIDAY, 11th JUNE.

The Conference resumed at 10 a.m.

CONSTITUTION AMENDED.

On the motion of Mr. Ward, seconded by Mr. Jacobsen, the amendment of Clause 10 of the Association's Constitution, agreed to at the previous year's Conference, was confirmed. Clause 10 reads:—

"Prior to the Annual Meeting at which they are to be elected, every Branch Association shall nominate a representative to serve on the Executive. This shall consist of not less than seven members."

As amended, the word "more" is substituted for the word "less" in the final sentence, thus providing that the Executive shall consist of not more than seven members.

DUTY ON IMPORTED TIMBER.

Mr. Bray introduced the question of the removal of the duty on imported timber, pointing out that the Dominion's supplies of timber are decreasing. He stated that the Farmers' Union were strongly advocating the removal of the duty on imported timber. He moved: "That the Government be asked to remove the duty on imported timber; and that the Standing Committee be asked to see this matter through."

Mr. Ward seconded, and a discussion ensued, the necessity for providing timber for hives being emphasised.

The motion was agreed to unanimously.

DUTY ON BEESWAX.

Mr. Bray said that three or four years ago a motion regarding the duty on beeswax was thrown out by Conference under a misapprehension. There was a duty of

1d. per lb. on beeswax, but there was no duty on comb foundation. This seemed in opposition to the policy of the Government to encourage New Zealand manufactures. He moved: "That the Government be asked when next revising the Tariff to put beeswax on the free list."

Mr. Ireland seconded.

In the discussion which ensued, reference was made to adulterated beeswax.

The motion was agreed to.

HONEY PUMP.

Mr. W. R. Brickell read part of a letter from Mr. J. H. Todd, of Renwicktown, describing a new honey pump, the difficulties experienced in connection with the ordinary style of pump being got over by a curved pump.

Several members showed much interest in the communication.

NEXT CONFERENCE.

On the motion of Mr. Sage, seconded by Mr. Ellis, it was decided: "That it be a recommendation to the incoming Executive that the next Conference be held in Auckland or in Hamilton at the Executive's discretion."

TAX ON APIARIES.

On the motion of Mr. Bray, seconded by Mr. Ellis, it was decided: "That it be a recommendation to the Executive to canvass the Branches to get a signed petition from the members of all Branches in support of the proposed tax on apiaries."

EXTENSION OF THE ASSOCIATION'S ACTIVITIES.

The President said that Mr. Ryland's paper on increasing the usefulness of the Association had evidently made an impression on members of Conference. Mr. McLean had asked that Conference should express its opinion on the following:—"That Mr. Ryland be asked to submit in concrete form to the Executive the reforms contained in his speech, and that they be forwarded to the various District Associations for confirmation."—"Should that be a recommendation to the Executive?" the President asked.

Conference responded "Aye."

TREATMENT OF FOUL-BROOD.

Mr. Clayton gave a demonstration of his method of dealing with foul-brood, and, in response to requests from members of Conference, promised to forward a description to the Journal.

OFFICERS ELECTED.

The election of officers resulted as follows:—President, Mr. W. Watson; Vice-President, Mr. E. W. Sage; Executive—Messrs. A. H. Davies (Hamilton), A. R. Bates (Kaponga), L. Irwin (Woodlands, Southland), and R. McKnight (Domett); Secretary, Mr. Fred C. Baines.

Mr. Allan, retiring President, expressed his thanks for the manner in which he had been assisted during his term of office, and for the confidence placed in him.

Messrs. Sage and Baines referred eulogistically to the work done by Mr. Allan.

Eulogistic references were made by Messrs. Allan, Sage, and others to the work done by Mr. Baines as secretary and as Editor of the Journal. "He is such an asset," said Mr. Allan, "that we cannot afford to let him go."

Voices: "We can't do without him."—(Applause.)

Mr. Jacobsen: "He won't get a chance to get out of it!"

On the motion of Mr. Sage, it was decided that the new Executive should take into consideration the question of increasing the Association's recompense to Mr. Baines, and make his salary commensurate with the work done.

Mr. Baines fittingly acknowledged the remarks made by the speakers.

A hearty vote of thanks was accorded by acclamation to the retiring President, members of Conference rising and singing "For He's a Jolly Good Fellow."

On Mr. Allan's motion a vote of thanks was accorded the ladies who had attended the Conference.

Mr. Allan then declared the Conference closed.

HONEY COMPETITION.

The Honey Competition attracted 20 entries, the winners being:—

LIQUID HONEY.—A. E. Dickie (Rotherham), 1st and 2nd; J. Irving (Albury), 3rd.

GRANULATED HONEY.—L. J. Henry (Peel Forest), 1st; C. J. Clayton (Peel Forest), 2nd; W. E. Barker (Peel Forest), 3rd.

DEPUTATION TO MEMBERS OF PARLIAMENT.

On the afternoon of Friday, 11th June the members of the Association's Standing Committee and some members of Conference met Messrs. L. M. Isitt, M.P., E. Howard, M.P., and D. G. Sullivan, M.P.

The more important resolutions arrived at by Conference were placed before the members of Parliament.

Mr. J. Rentoul, Chairman of the Standing Committee, said that beekeepers complained that there had been serious neglect of their business: they had not had a fair and square deal from the Government as compared with other industries. He dealt with the question of railway rates on the lines of the paper he delivered before Conference; also with the necessity for the better administration of the Apiaries Act.

Mr. C. F. Ryland quoted the following comparative railway rates in respect of the same quantity of the products mentioned:

	Honey.	Butter.	Fruit.
50 miles ..	£1 1 1	£0 12 3	£0 8 2
100 miles ..	1 12 1	0 17 6	0 11 9
200 miles ..	2 4 2	1 5 1	0 16 9
300 miles ..	2 14 3	1 12 8	1 11 10

Replying to Mr. Sullivan, M.P., Mr. Rentoul said that the railway authorities, when approached, had given no reasons for the disparity of these rates; practically all the satisfaction got by the Association was the statement that the Railway Department might increase the rates on other produce rather than reduce the rates on honey.

Mr. Ryland dealt with the necessity for increasing the salaries of apiary inspectors and honey graders. Instead of a maximum of £290 per annum, they should be paid as well as dairy produce graders, who got £400 per annum.

Mr. Baines dealt with the question of the appointment of a Chief Apiarist, and with the need for more inspectors in order

to cope with foul-brood. There had been 92 delegates present at the Conference, and all had testified to the fact that foul-brood was rampant in their districts.

Mr. Watson: The position cannot be questioned.

Mr. Isitt said that members of Parliament knew what the position was in respect of foul-brood.

Mr. Ryland read the Conference resolution respecting the imposition of an annual tax of £1 on all keepers of bees.

Mr. Sullivan, M.P.: Have you had an expression of opinion from your Branches on this proposal?

Mr. Ryland: No; but the question has been discussed for years, and almost every representative beekeeper would be as unanimous as Conference was. The measure was not a revolutionary one; it had been tried in Canada and various other countries, and had been found the means of keeping down foul-brood. Reference was made to the self-imposed taxes paid by nurserymen and orchardists.

Mr. Ryland said that the proposed tax, in addition to providing salaries for additional inspectors, would probably be sufficient to provide funds for the development of the export honey industry. The export of honey could be increased 500 per cent. "Those are big figures," he added, "but they are quite right." The Dominion can produce 500 times its present output of honey, and the industry is well worth helping."

Mr. Isitt, M.P., thought that the beekeepers would be up against the opposition of the beekeepers who kept one hive, voiced by their representatives in Parliament, to the imposition of a tax of the same amount all round. He quite realised that it was the one-hive men who breed foul-brood.

In the course of a more or less conversational discussion, it was suggested that the commercial beekeepers should pay £1 per annum, and other beekeepers 10/- per annum, any person selling honey, no matter how small the quantity, to be classed as a commercial beekeeper.

Ultimately the representatives of the Association said that they would be agree-

able to consider the compromise suggested; they were quite prepared to have the tax removed once foul-brood was eliminated; there was no desire to squeeze out the small man—they wanted men to become better beekeepers.

Mr. Isitt, M.P., said that if a tax of 5/- per annum were imposed on non-commercial beekeepers, it might be possible to get the Government to subsidise the amount raised. He suggested that in the circular the Association intended forwarding to all members of Parliament, the figures relating to railway rates should be quoted.

The question of the rumoured issue of regulations preventing the removal of bees and queens from the Auckland district owing to the danger that they would carry fire blight, was brought up, and Mr. Isitt, M.P., urged that the Association should communicate by telegram with the Government on the subject right away.

At the conclusion of the interview, Mr. Isitt, M.P., said that his fellow-members and himself recognised the value of the honey industry, and of the work the Association was doing; they recognised it was a growing industry of great commercial value, which would find employment for many returned soldiers who were not able to take up more strenuous work. They were prepared, and he believed that the majority of members of Parliament were prepared, to do everything possible and reasonable to help the honey industry.

Mr. E. W. Sage conveyed the thanks of the deputation to the members for the courtesy with which they had received them.