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Apiary of W. E. Barker, Rangitata, Peel Forest.

ISSUED MONTHLY
FOR
THE NATIONAL BEEKEEPERS'
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March 1, 1920.]

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The New Zealand Beekeepers' Journal

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

No. 3

Vol. 4

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National Beekeepers' Association of New Zealand.

The object of the Association is the improvement of the Beekeeping Industry and furthering the interests and prosperity of the Beekeepers throughout the Dominion. Membership is extended to any Beekeeper who is in accord with the aims and objects of the Association on payment of fees as follows:—1 to 15 Hives, 5/-; 16 to 50 Hives, 10/-; 51 to 100 Hives, 15/-; 100 to 200 Hives, 20/-; every additional 100, 5/- extra.

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EDITORIAL.

We made a few comments last month on the question of Apiary Boundaries, wherein we suggested that as the interest taken in the matter, beyond the gentlemen who formed the Committee, was absolutely negligible, the question be allowed to drop. As we said before, if the matter were vital to the industry, considerably more interest would have been taken in discussing and criticising the proposals put forward; and if more evidence is required

that the question is not a vital one, it is found in the "storm of protest" that the matter be dropped, which is shown by the number of letters received. These number two, and one is from a member of the Committee. Mr. Nelson is wrong in his impression as to what happened in Conference last year when this question was opened by a paper read by Mr. Ireland. One speaker was for the proposal, two others were not, and that was all that was said on the matter when Mr. Ireland moved his motion that a Committee be set up to confer with the Department. The motion was carried, and there the matter ended; in fact, we believe there was less

discussion on this question than any other. Every commercial bee-keeper in the country takes the Journal, and the number of complaints we have received since the question was started are three—Messrs. Horn, Nelson, and Housler—and on these we are asked to bring about legislation that is bristling with difficulties of a constitutional nature; also the very great possibilities that the industry in general would be worse with the proposed legislation than without it. But the crux of the whole matter is that the proposed clauses have not called forth one favourable comment, not unqualified antagonism. To say this is because the clauses are not properly understood rather reflects on the Committee that the clauses were not put in language that the meaning would be clear. It seems to us that we are trying to convince ourselves that the industry is suffering from a very serious handicap, but when we ask for evidence, it is not there. Regarding Mr. Nelson's complaint that the clauses were for the Executive only to consider and not to be spread broadcast before this was done, the organ of the National could not possibly ignore them when they were published in two other Journals previous to appearing in our columns. We think it would have been better for all concerned if they had not been made public, but our President thought it would be better for the Executive to get the feeling of the beekeepers, with suggestions to help the Executive on this debatable matter. This the Executive has obtained, but in rather a different direction to that anticipated. We suggest that the verdict of "Not Proven" be brought in, and the Committee dissolve "without a stain upon its character".

We commend to the notice of our readers the article on the metal foundation published in this issue. The experiment was conducted under the most unfavourable conditions, being winter, with temperatures down to freezing point, and yet by feeding with sugar syrup, in itself unnatural to the bees, perfect combs were built. We congratulate Dr. Abushady on his success, and we believe he has given us an appliance that will be ranked on a par with the extractor and moveable frame hive. The sheets of metal for making this foundation which were sent by Mr. Hooper Teed to Ruakura are now being experimented with at the State Apiary, and we will report results as soon as available.

Dr. Abushady's paper, 'The Bee World,' is, we suppose, the youngest publication on the industry in the English language, yet we are sure it is one of the best, particularly for the beekeeper who sees more in a hive of bees than the actual cash return, and is interested in the happenings within the hive; on the many functions of the queen, drones, and workers. What pleases us particularly is that the good doctor and his colleagues seem to prove everything; the fact that a certain opinion has

been held and accepted as correct does not satisfy them; they prove it, and as the invention of the metal foundation exemplifies, sometimes they find the established ideas are not correct. We strongly recommend 'The Bee World' to our readers. The subscription is only 2/6 per year, and is published by the Apis Club, Port Hill House, Benson, Oxon., England.

We were glad to learn from Mr. Kirk's remarks at Ruakura that it is probable that Mr Goodin's services as apiary inspector are likely to be retained. It is admitted all round that we are in want of more inspectors, not less, and Mr. Goodin is an experienced man, has proved himself a tactful and useful temporary officer, and a great worker; in fact, is just the sort of man the industry is in need of, with a few more added to the number. With the increased vigilance necessary to watch out for the Isle of Wight disease, we think it would be out of keeping with the Department's assurance to give us all the help possible if we lose any one of the staff through lack of adequate salary.

The Executive of the National will meet in Wellington on March 15th and 16th. If any member or Branch has any matter they would like brought forward, please write the Secretary, c/o G.P.O., Wellington.

Market Reports.

Since our last report there has been a steady to fair demand. The following prices have been obtained:—

Chilian.—300 barrels, Pile 1, 91/- to 91/6 per cwt.; Pile 2, 87/6 per cwt.; Pile 3, 81/- per cwt.; No. Pile, 69/- per cwt.

Jamaican.—400 barrels at 77/6 to 90/- per cwt. Second hands are selling other kinds at steady prices.

Beeswax.—The market is very slow, and there are very few transactions. We repeat our last quotations. African, £9 to £9 10s.; Chilian, £10 2s. 6d. to £11 2s. 6d.

TAYLOR & CO.

Liverpool, 28th November, 1919.

Throughout the month the market has been practically bare of choice, clear liquid, and, although sales usually are limited throughout the hot weather, an exceptional demand has ruled. On the other hand, dark sorts have been fairly plentiful and dull of sale except at a price altogether out of proportion to values ruling for other lines. At the present time small parcels are arriving from western districts, and improved quantities, almost sufficient for immediate requirements, are coming from Tamworth. Choice liquid is selling at 8d. per lb.; choice candied, 7d. to 7½d. per lb.

"Australasian Beekeeper," Jan. 15.

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

Auckland.—Welcome rains have now fallen, but too late to ensure good honey crops unless the season is later than usual. The prospects are likely to be somewhat below the average. Prices remain steady for both honey and beeswax. As the sugar shortage is likely to continue for some time yet, beekeepers are advised not to extract too bare, but to leave sufficient on the hives to prevent the bees from starving during the coming winter.—G. V. Westbrook.

Wellington.—There is every indication of the honey crop being a good one this season, as the recent rains experienced throughout the district will have a good effect on the growth of plant life generally. It is too early to predict the crop returns, but they should be equal to last year's production. Some beekeepers have already commenced extracting operations.—F. A. Jacobsen.

Christchurch and Dunedin.—As indicated last month, the crop will be above the average in most districts. The clover has bloomed freely, and excellent rains have fallen, keeping the pastures in good heart. Extracting is in progress, and the quality of the honey taken is excellent. Merchants are operating, and it is expected that prices will harden as the season advances. Prices are firm. Bulk honey is quoted from 7d. to 8d.; sections to 10/6. Beeswax is scarce, and is being offered in small parcels at 2/3 per lb.—E. A. Farp.

Beekeeping for Beginners.

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

The honey flow for the season is now over, and our business is to get everything in readiness to winter the bees successfully. One of the chief matters to ensure this is to see that the hives are all well stocked with bees and brood, indicating young and vigorous queens.

Hives that show frames of patchy brood and few bees should be re-queened.

There are a number of "short-cuts" practised in introducing queens, but the beginner is advised to adopt the cage and candy method, as that is as reliable and successful as any.

If you are buying queens from a breeder, it is advisable to add to the price of the queens the cost of a wire, so that you may know when they are being sent off. On receipt of this, kill off all the queens you are replacing, and when the cages arrive examine carefully to see the queen is alive; if so, then remove the small piece

of wood and the candy end of the cage, and place this wire face downwards on top of the frames, so the bees can know they have a queen. It will take from 24 to 48 hours for the bees to eat away the candy to release the queen, during which time she will have acquired the scent of the cluster, and almost invariably she will be accepted. Do not disturb the hive for about a week after introducing, as it sometimes means the loss of the queen if she has not settled down to her business.

The next important thing is that ample stores are left. The two outside combs should be solid with honey, and every comb well stocked all round the sphere of brood. It is well said that the best time to do your spring feeding is in the autumn, which, of course, means that it is the best policy to leave ample stores to carry the bees, not only through the winter, but well into the spring. I also advise you to reserve at least one good frame of honey for every hive you have; then if the spring should turn out to be unsettled and bad for the bees to get out, you have the very best food available for them if it should be required.

It is advisable to contract the entrances to about 6 in., as this gives the bees a better chance of defending their hives against robbers.

F. C. B.

Mr. W. Lenz, of Masterton, having returned from active service, has taken over the apiaries of Mr. D. Hosking. These apiaries were established by Mr Lenz, sen., whom we recognised as one of New Zealand's foremost beekeepers. We welcome Mr. Lenz, jun., into the ranks of commercial beekeepers.

All over the Dominion there are cries for greater supervision and inspection. In sheer desperation one commercial beekeeper has decided to buy diseased bees wherever possible and destroy them. Meanwhile the few inspectors are overworked and underpaid. Wake up, New Zealand!

We are able to report that very few of the H.P.A. suppliers have been affected by the tempting offers to weaken the Association. Their foresight and business instinct is greater than was expected by some merchants.

TALL TALK.

Overheard in an American workshop.—"I sny, Mr. Beeman, can you tell me the best method of securing a swarm which has pitched so aggravatingly high on a tall tree?"

"Waal, I guess I can! The quick and easy method, if it's yer own swarm, is, I reckon, to quick and lively fetch out yer pea-ride to the scene of action, and shoot the queen bee! The swarm will then return home!"

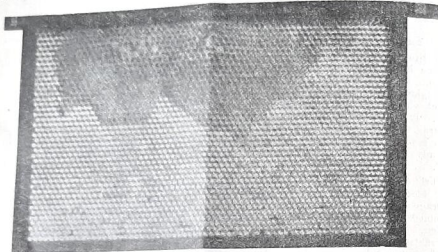
H. C. J.

The Metal Foundation.

[NOTE.—The following extract and illustration are taken from "The Bee World," October, 1919. In view of the interest taken in the successful experiment with the metal combs at Ruakum, which now has the metal foundation under experiment, the inventor's remarks will be followed with increased interest.—Ed.]

to insure the safety of bees when travelling, nor has it given us a guarantee of compelling the bees to adhere to the building of worker cells. The commercial apiarist has still to rely on old wax combs (where metal combs are not available) for the sale of his bees, and often to the disgust of the non-appreciative novice.

The origin of metal foundation lies in our close observations of the habits of bees, and our appreciation of their acute



THE METAL FOUNDATION.

A British Standard frame fully fitted with a sheet of "round-ridged" metal foundation of the worker type, acting both as a true comb "foundation" as well as a self "support," thus serving a double purpose. The worker cells shown were built and partly stored with syrup four days after its insertion in a hive containing another frame which was receiving greater attention (apparently because it was nearer to the dummy feeder employed). Original combs of the hives were previously removed. Consider the extent of wax building within this time, at a temperature which has rarely exceeded a maximum of 40° F., and which has often been below even 32° F.

The frame was photographed at night (in artificial light) following a demonstration, and is partly out of focus. Bees fully established on a comb built on metal foundation were also exhibited in an observatory hive.

Dr. Abushady, after reviewing the introduction of wax foundation and its demerits, says:—

The greatest demerit of the wax foundation is its destructibility. The corrugated metal core introduced by Jung and Camner has not improved this. Such thin metal as they advocated, possessing nearly the gauge of the coil of a stapling machine, was bound to buckle and to end in the separation of the comb from the solid core, with disastrous results. It meant an unnecessary expense and a disappointment. The ingenious wiring process introduced by Vandervost has proved a little better, although few would deny that it is a big nuisance. Finally, Dr. Miller's splints method made its appearance. It prevented the sagging of the foundation, but it did not succeed in securing the comb to the frame so as to be a real safeguard against wholesale breakage when bees are travelling in hot weather. Therefore, so far, wax foundation and the methods of its attachment and support, whether in use at present or formerly introduced and discarded, have not helped us in any way

sense of touch, apart from our endeavour to evolve a practical compromise between the metal comb and the wax comb (as built on wax foundation).

We have known bees to build wax on paper instead of gnawing it (and of this there is a specimen in the museum of the Apis Club), and on glass, let alone good worker cells on wood. Is it conceivable they would ignore embossed metal foundation? But there the question of a "wax bait" cannot be ignored. It has been handed down from one generation to the other, and is still chaining us.

Yet we do not know of the existence of such a bait in a new skep which may be accepted by a swarm, and we have known the existence in an old one in which a swarm would not stay. Reviewing these matters again and again did not lead us except to the advisability of experimenting with naked metal foundation for the purpose of securing regular worker cells, and overcoming all the disadvantages of wax foundation, whilst retaining any advantages which the wax comb may possess.

Testing was conducted in the light of a control experiment with wax foundation. Altogether the bees from five colonies were employed. Candy entirely failed to induce the bees to build wax at the prevalent temperature, which was often below 40°-32° Fahr. The bees merely clustered on the frames and around the candy. It was not until syrup feeding, a few days later, was started that they began comb-building, and at a good rate, but not until the original combs in the hive were removed. Approximately the rate of wax-building on both experimental model and control was the same so far as may be judged by the total surface area of the combs produced. No drone cells were built on the wax foundation. An area of about one square inch of drone cells was built on the metal foundation, but when this was removed it was not repeated. As best as possible the strength of the bees in both hives was equalised, the bees were hived through the entrance by shaking the combs with the adhering bees on an extension hive platform. The mortality through this practice and through the repeated opening of the hives at most unfavourable degrees of temperature was very high, since the flying bees got quickly chilled, and many attempted with failure to return to their original hives. Nevertheless, sufficient number of bees were maintained to secure comb building. In thirteen days a respectable worker comb with capped stores was available on round ridged metal foundation, and others were in course of development in proportion to the bees present, and which were densely clustering, so many of them acting as an insulating screen to the wax builders, which occurs also during the season, but which is bound to become exaggerated in cold weather that is normally unsuitable for wax-building, unless the bees are obliged to do so, as shown by this experiment.

After making every possible allowance for experimental fallacies, one cannot escape from arriving at the following conclusions:—

1. Bare metal foundation is acceptable to bees under highly unfavourable conditions. It is logical that it should be equally acceptable under average seasonal conditions. Nothing at all has prevented the bees from treating the foundation as a mere board, from building comb on a dummy feeder only, or even from entirely decamping. The latter would not have been the first of its kind to be recorded under winter conditions.
2. Bees have a very acute sense of touch, and if a round ridged metal foundation is acceptable to them, it pays to utilise thick metal for the sake of greater solidity, rather than use thin sheets which would buckle, merely for the sake of obtaining sharp ridges. There is no disadvantage in having round ridges for the prints on the foundation, since firm pyramidal bases for the side walls would result through it.

3. Wax foundation has obviously the claim for which it was originally introduced, namely, to secure a maximum of worker cells, and better, even, movable combs than secured otherwise. It has no additional claims, and we need not emphasise its failures. They are met with in every-day practice.

4. Non-poisonous metal foundation, such as **one made of an aluminium magnesium alloy**, will not in the least offend the bees by its odour, since it has practically none. It will further give them as equal facilities for a "grip" as presented by the glossy wax foundation.

5. If the foregoing conclusions are to be correctly appreciated, the camouflaging of metal foundation (in the proper sense) by a wax lining or a spray would not only be an unnecessary practice, but a wasteful one.

6. The revival of a wooden core, or a metal one that would buckle and present gross disadvantages instead of improvements, is hardly fitting for the progress of the time, and is an unnecessary extravagance.

7. The wintering of bees on combs constructed on metal foundation may be inferred from the successful wintering of bees on metal combs in North America. A wax comb built on metal foundation is but a metal comb, the metal cells of which have been replaced by waxen walls.

The experiment has served other purposes which we need not refer to here.

The disadvantages of the metal foundation, as with every other foundation, are limited to the absence of a ready-made comb. Its special advantages may thus be summarised, and, although obvious to ourselves, may be profitably emphasised. These are:—

1. Its indefinite durability and re-use with reasonable care.
2. Its cleanliness and adaptability for sterilisation by boiling.
3. Its capability of bearing the weight of the heaviest swarm without buckling in hot weather (due regard being given by the manufacturers to gauge selection).
4. Its solidity, which to a great extent safeguards the lives of bees in transit.
5. Its regular usefulness, in the hands of a watchful apiarist, for securing a full complement of worker cells and truly even combs.
6. Its adaptability for the removal of queen cells without destroying the foundation.
7. Its saving in labour in fitting by excluding wiring.
8. Its fitness to be produced and handled at any time, unlike wax foundation, which is brittle in cold weather.

The metal foundation may, therefore, claim to be considerably in advance of the wax foundation, and to have served as an ideal compromise between the latter and the metal comb.

The Hagerty Steam Knife & Cappings Smelter.

The two appliances in connection with the industry that have come to the fore very much of late years are the steam heated uncapping knife and cappings reducers or smelters.

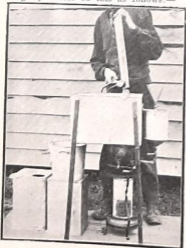
The steam knife invented by Mr. A. C. Miller, of Providence, Rhode Island, U.S.A., had the inlet close to the handle and the outlet at the top point of the knife. The drawback to this was that the condensed steam issuing in the shape of water was always dripping into the honey, which was, to say the least, undesirable.

Mr. Donald A. Lea, of Westmere, Wanganui, improved on this by inventing a knife where the steam circulated right round the knife, having the inlet on the opposite side to the inlet near the handle.

The knife under review has a jacket along the blade so that the two edges and point of the blade project beyond the jacket for a short distance, thereby providing edges that may be ground. This jacket space is divided longitudinally by means of a baffle plate, so disposed that it extends from the butt end of the knife to near its point, and transversely extends from across the middle line of the knife downward. The heat will, therefore, pass along between the baffle and the jacket on one side and be concentrated to the point of the knife where the greatest heat is required, and also along to the edge of the blade, and will then travel back outside the baffle to the outlet. This knife has been spoken of very highly by those who have used it.

THE CAPPINGS CAN OR SMELTER.

The appliance illustrated has been in use by the maker now two years, and Mr. Hagerty writes on this as follows:—



You will notice the novelty lies underneath and the back. The inside is similar to the Baines' reducer, with six triangular tubes. The boiler underneath works with half a gallon of water; the reservoir behind has cold water, with a water-glass to show the height of the water in the boiler. There are two taps—one between the boiler and reservoir on the pipe entering below the water-line; the other between the funnel and reservoir.

The appliance is well stayed, and works with a high-pressure steam; the blow-off is through the knife, which tube has a regulating tap. You will understand you can get as high a pressure of steam from a small body of water, with as much heat as you can from a large volume of water; therefore, you do not require the same amount of heat below the boiler. The novelty is being able to feed the boiler gently to make up for the blow-off.

I have not patented the machine, so if any of those gentlemen working with a five-gallon oil-drum will adopt the principle, it will save them from getting blown up or roasted, and they are at liberty to use it with my compliments.

I am particularly interested in the above appliance, as the making of these has been one of my pet hobbies. When I introduced the Baines' Cappings Melter at the 1913 Conference, it was speedily recognised as the "best yet" for the disposal of cappings, and was quickly taken up by those requiring such an appliance.

When this reducer is used with a high-pressure boiler, it will handle combs of unextractable honey quite satisfactorily; but this means the employment of an outside boiler.

Mr Hagerty has apparently solved this difficulty by the use of the small boiler containing only two quarts of water, which, he says, gives you the requisite heat, not only for the melter, but also the knife, which is a very decided improvement. When extracting, I use a three-burner Perfection stove of the old pattern, with asbestos wicks, my melter over two, and steam knife over the third, which means "some" heat in the honey room. The only doubt I have is whether the small quantity of steam generated would get up to high pressure if good fat combs were being uncapped level with the frame into the machine for any length of time. It seems to me that these would so cool the machine that the steam would simply condense in the tubes, be converted to water which would run into the boiler, and thus prevent the necessary amount of steam being generated.

In any case, I hope we shall be able to arrange for a demonstration of the appliance at the next Conference, where we all shall be able to see its capabilities.

A machine that will reduce cappings and heat the steam knife at the same time, doing both jobs satisfactorily by the use of a one-burner Perfection stove, has a great future before it, so I shall look forward to a demonstration with great interest.

F. C. B.

Ruakura Field Day.

This pleasant annual function took place at the State Apiary, Ruakura, on Wednesday, 4th February, and, the weather being glorious, it was an unqualified success.

Mr. A. B. Trythall and his cadets had everything in readiness for the opening of the proceedings at 10 a.m., when Mr. A. W. Green, the manager of the Farm, gave a brief welcome to the visitors, stating that he always looked forward to this Field Day, as not only did it give the visitors a chance of seeing what was being done at the State Apiary, but by the getting together of a large number of those engaged in the industry, much good was to be obtained by the exchange of ideas. The cadets, too, would benefit by the addresses given by the experts. He noted with extreme pleasure the presence of Mr. W. S. Fandler, one of the best-known beekeepers in Australia, and editor of the *Australasian Bee Journal*, and hoped that Mr. Fandler would spend an enjoyable day amongst them. Mr. Green also noted the presence of Mr. I. Hopkins, to whom the industry in New Zealand owed so much, and was glad to see him again taking the usual interest in everything connected with the industry. He trusted everybody would spend a pleasant and profitable day.—(Applause.)

Mr. T. W. Kirk, Director Horticultural Division, stated he was very pleased to see the large number of visitors, as it indicated the growing interest being taken in the industry of beekeeping. He gave a few interesting figures, which would emphasise the growth of commercial beekeeping. In 1911 the total output of honey, wax, &c., was valued at £31,000, which, if computed at to-day's value, would be over £200,000. The number of hives on the registered lists was 67,600, and there were still about 7,000 to be registered. The Department computed the invested capital in hives, appliances, &c., &c., at £1,014,000. The value of honey exported last year was £32,000, which was more than the whole output in 1911. Mr. Kirk asked for the co-operation of the beekeepers to get the whole of those keeping bees on the registered lists, as it was only by this the inspectors could do their work thoroughly, with a minimum of lost time looking for stray hives. Mr. Kirk stated that he would probably be retiring from the Public Service in 18 months' time, and hoped to see the visitors again next year, when he would find the industry in a far stronger position than it was to-day.—(Applause.)

Mr. E. W. Sage (President of the Waikato Branch) expressed his great pleasure in seeing the number of visitors, and in the name of the Branch gave them a hearty welcome. He thanked Mr. A. W. Green, the manager, for again giving them the use of the State Apiary for their annual gathering, as there was no better place in the Dominion for such a purpose.

Mr. Sage drew attention to the urgent necessity of granting the inspectors larger powers, as he cited a case where twelve colonies of bees were brought from Auckland to the Waikato, and eleven of them were diseased. What is the use, he asked, of the inspectors, both local and permanent, working year in and year out to keep their districts clean when this sort of thing was permitted? He considered it scandalous that such an action could not have been prevented.

The demonstrations commenced with Mr. A. B. Trythall, officer in charge, who gave a brief outline of the experiments and work done at the State Apiary. The whole of the various appliances were shown, with their uses, and, as usual, Mr. Trythall was all attention to supply questioners with the fullest information.

The aluminium comb attracted a great deal of attention, there being an unused comb just as received from America, and others containing brood and honey, also those used for surplus. It must be allowed that as far as one could see, the queen and bees accepted this latest invention quite satisfactorily, and it would be only quibbling to take exception to the cells missed by the queen owing to the braces running through the comb in four places. Later in the day the "surplus" combs were put through the extractor. We were given them to uncapp, and took no pains to alter our method as when uncapping wax combs, and in spite of the combs not being well built out all over, there was very little damage to the cells noticeable. With combs well filled out beyond the wooden frame, it would be only carelessness to damage the metal part of the comb. One frame of unextractable honey was brought from the Tauranga State Apiary to see how it would fare in the extractor. Although the honey did not come out quite clean, the demonstration was sufficient to indicate that with power and a good rub in the extractor, the amount of thick honey retained would not be very much. Altogether, we are much impressed with the aluminium metal comb.

Mr. G. V. Westbrooke gave a demonstration of wiring frames with electricity. Personally we were not impressed with the utility of the appliance.

After lunch, Mr. F. C. Baines, Secretary of the National Association, made a few brief remarks on the Association and its objects, inviting those present to link themselves with the Branch, and become subscribers to the Journal.

The claims of the co-operative market for selling was advocated by Mr. S. Turbott, of the H.P.A., who apologised for the absence of the manager, who was in the South Island.

Mr. W. Jordan, travelling representative of the H.P.A., gave a brief outline of the symptoms and effects of the Isle of Wight disease in England. Having recently arrived from England, where he met a great number of beekeepers, he was able to

give us full particulars as to what the disease really is as it affects the hive. Mr. Jordan corrected an impression of ours: we understood the affected bees had the shiny, greasy appearance as with paralysis, but this is not so; rather they appear as if they have been dusted with a greyish dust similar to pollen. Mr. Jordan asked those present that should they see any bees having this appearance crawling about the apiary, to put them in a box and send to him. Mr. Jordan's remarks were listened to with very close attention, and on the motion of Mr. C. F. Horn, seconded by Mr. H. C. Jones, the following proposal was submitted:—

"That this meeting of beekeepers, having learnt the seriousness of the Isle of Wight disease, recommends the Executive of the National Association to urge upon the Department the necessity of prohibiting the import of queens, bees, beeswax, and appliances from where the disease was known to exist."

This was carried unanimously.

Mr. Baines stated he would lay this matter before the Executive at its next meeting.

Mr. S. C. Rhodes, officer in charge of the Tauranga Queen-rearing Apiary, gave an address on queen-rearing, showing the different methods used.

Mr. C. F. Horn demonstrated a quick way of disinfecting hive bodies. An empty kerosene box, with one side knocked out, was laid on its side, and a small bundle of light kindling put inside. On this was stacked seven supers, and the fire lighted. The draught caused by the supers acting like a chimney stack, the flames in less than a minute were right up to the top, and immediately this occurred the stack was knocked over by the foot, and every box was found to be well scorched.

Mr. T. H. Benton had his queen cell incubator on view, and gave a few remarks on the working. This is a frame of 3/8-inch timber, same size as hive, about 3-in. deep, having the back on a hinge. In the centre is a drawer about 4-in. wide, with circular holes in the top to take the cells, both the drawer and the parts occupying the vacant space being made of wire screen, with a bee-way about 1/2-inch wide on either side of the drawer, so that the bees can get through to brood chamber and super without being on the cells. This appliance, placed immediately above the brood-nest, would get the requisite heat for the cells. To remove a cell, just go to the back of the hive, open the hinged side, pull out the cell drawer, take what you want, and close up again. We like the appliance. A hearty vote of thanks was passed to Mr. Benton.

Messrs. R. F. Bollard and J. A. Young, M.P.s. for the district, both spoke on the importance of fostering the young industries of the country, and promised their hearty support to any matter brought before Parliament to this end.

Mr. A. E. Hobbs, of Papakura, gave a very interesting little address on beekeeping in the Waikato 25 years ago, where he and his brother (Mr. J. C. Hobbs) worked them. The speaker said he again felt the call of the bees, and was now working up a commercial apiary.

The capping melter demonstration attracted a large number of people, and as a high-pressure boiler was installed for the purpose, everything was as it should be. There were three machines being demonstrated—the Smedley, Bartlett-Miller, and Mr. F. A. Johnson's. Whether the engineer in charge was out to give a demonstration on his own or not, we do not know, but he added considerably to the interest. After the demonstrators had got all the tubes and connections made (apparently) fast, the engineer was ordered to put on steam, when—Bang! Sh-h-h-h! went the steam.—(A Voice: "Look out for your eye!") Steam, steam everywhere, enveloping everybody.

A Voice: "What's this? Physics of heat?"

More steam! Confusion! Somebody opened the exhaust valve of the boiler, and—more steam! Steam-knife tubes flying off, connections leaking, one machine instead of having straight triangular tubes looked, as somebody remarked, like a German sausage trodden out, with steam blowing out in all directions.

A Voice: "For heaven's sake shut off the steam or we shall all go up!" Instead of which the exhaust valve was again opened, and—more steam!

Eventually the pressure (85 lbs.) was taken off, and the machines examined, and, apart from the solder blown out in two or three places and a slight contortion of the tubes in one machine, no very great harm was done, and the demonstration was proceeded with under more peaceful circumstances, with the engineer chuckling.

The machines were all good, and, judging from the questions being put to the demonstrators, it was much a question of fancy as to which was the most efficient. A most interesting exhibition, with a lot of fun thrown in!

After afternoon tea had been served, the President (Mr. E. W. Sage) called for a hearty vote of thanks to Mr. A. W. Green and the Department's officers, also to the lady cadets, for their attention to the comfort of the visitors. This was carried by acclamation, and a most enjoyable day closed.

F. C. B.

Overheard in Lakeside, Canterbury.—"Did anybody remark on the way you handled the new car?"—"One man made a brief remark—Forty shillings and costs!"

Overheard in Rangitata.—"No, sir, I'm not a bit downhearted; in fact, in spite of the Department's unkindness, I'm going to put a Brussels carpet down in my honey shed!"

District Reports.

AUCKLAND PROVINCIAL BRANCH.

Well, the great day came and went, and this individual did not get there. You can imagine my feelings, after dosing up with quinine, &c., having to sweat it out again between the sheets, while most other "insect fussers" were having the time of their lives a few miles away. I heard everyone seemed to be having a good time, and the programme went all right. There was whisper of slight explosion, but I am leaving the report of the meeting to one who was on the spot.

Re Apiary Boundaries Question.—It has taken up a fair amount of space in the Journal lately, and could be kept going till Doomsday. Before it is dropped, as you suggest, I would like to see a vote-taken of subscribers, and would suggest that a small slip of pink paper be inserted in each Journal, numbered up to the required number, to be returned to you with "Yes" or "No" written on, and that result should be published in the following Journal. To let the matter drop, as proposed, before we have accomplished something—well, we might just as well have thrown in the sea the money that it cost us to send our Committee to Wellington and back. Let us get the feeling of the majority.

Mr. Goodin's Resignation.—We cannot understand the Department's attitude in this matter. For some time we have been promised two extra permanent inspectors for the Auckland Province as soon as they were available. When Mr. Goodin's time is up, we will be left worse off than we have ever been—one man to do three times the amount of work in the field that there was a few years ago, as it is generally known that Mr. Westbrooke does not now have the time to attend to this class of work. Take this with the ever-increasing number of colonies arriving in this district, foul-brood is not going to get the check that is urgently needed. On a recent tour I was amazed to find the condition some bees were kept in. At one place there were about 20 colonies, and not one of them that you could get at the brood; in fact, some had sections in brood nest. I am wondering how this man fared at the hands of the Department. I intend visiting him again shortly to see. We are still hoping for the best, and that Mr. Goodin will be retained, or someone else appointed in his place as soon as possible.

A. H. DAVIES.

Hamilton, 10th Feb., 1920.

SOUTHLAND.

The annual Field Day of the Southland Beekeepers' Association was held on Wednesday, 21st January, at Mr. Carl Larsen's apiary at Myross Bush. The weather was perfect, and over 100 visitors were present. Mr. Robert Gibb, the President of the

Southland Association, was in command, and directed the day's operations with all his usual skill.

The first address was by Mr. James Allen, President of the National, and one of the oldest beekeepers that Southland knows. His theme was "The H.P.A.," and the coming visit of Mr. Rylands, the general manager of that concern. Mr. Rylands had hoped to be with us, but had been unable to fit our meeting in with his earlier engagements. He would however pay a special visit to Southland on the 11th February and every beekeeper was urged to be present on that date as the success of the H.P.A. was one of the most important factors in the success of every honey producer.

Mr. Gibb followed with an address to beginners, taking them through a great deal of necessary detail work, and stressing the great importance of starting with clean bees, and using most extreme care to prevent infection with foul-brood. During Mr. Gibb's address a swarm came off, and the novice received a practical lesson in how to hive it by Mr. Larsen, who created great merriment by his comments during the operation.

After the swarm was hived, Mr. Brogan gave a demonstration of the McEvoy method of treating foul-brood.

Mr. R. Stewart then showed how to cage a laying queen and introduce the cage to a colony that had just had their queen removed. Mr. Stewart was, perhaps, the most-sought-after man on the ground throughout the day, being followed around by eager beginners, who inundated him with questions, all of which were promptly answered in terms that the beginner could comprehend. It was a most inspiring spectacle to see our master queen-breeder giving freely to all and sundry of his knowledge and skill, and must have struck many who were present as a great contrast to the feeling that obtains in many other callings, where the leaders concentrate on keeping their methods secret lest the beginner should prove a rival in later days.

Mr. Allen then gave a brief address on the National, and urged all beekeepers to support it. He was followed by Mr. Gibb, who referred to the fact that the Southland Association had got into a backward condition, and very few subscriptions had been received last year. This was mainly the result of disorganisation following the death of our late secretary, Mr. L. Gardiner, who had for many years proved of the very greatest value in that position.

Mr. Gibb then introduced Mr. Irwin, who would carry out the secretarial work in future. Mr. Irwin appealed to all beekeepers present to join the Association, as the delightful day we had enjoyed was only possible if an effective organisation was maintained. Another thing that every beekeeper should do was to subscribe to the Journal, and another was to take shares

in the H.P.A. This would keep the individual beekeeper in touch with all the leaders of our industry, and would be of great help to the men who were doing such good work at the head of our organisation. A number of those present handed in their subscriptions, and several others promised to do so at a later date.

At this juncture tea was announced, and was much enjoyed.

Before separating, Mr. Gibb called for cheers for Mr. and Mrs. Larsen for their unbounded hospitality. These were very heartily given, and shortly afterwards the gathering broke up.

L. IRWIN.

GERALDINE.

A very successful Field Day was held at Mr. W. Watson's apiary on 5th February, which was attended by about 40 people, visitors coming from Temuka, Pleasant Point, and Peel Forest. Mr. J. Rentoul (Chairman) and Mr. C. F. Ryland (manager of the H.P.A.) were both present, and gave interesting addresses on the advantages of the co-operative system of selling honey. Mr. Ryland emphasised the fact that, given the loyalty of the beekeepers, they would soon have one of the strongest co-operative associations in the Dominion.—(Applause.)

Mr. C. J. Clayton gave his system of treating foul-brood, and answered all questions relating thereto in a manner that gave satisfaction to his hearers, and was accorded a hearty vote of thanks.

Mr. E. Simpson gave an interesting lecture on the manipulation of the hives for good results in the prevention of swarming and storage room, and was heartily thanked for his helpful remarks.

Mr. W. Watson gave a practical demonstration and explanation of the use of the various appliances in use in an up-to-date apiary, which, to a number of visitors, was a revelation.

After the demonstrations were over, the hostess, Mrs. W. Watson, dispensed afternoon tea, and her name, with those of the others who had given them such an enjoyable day, were accorded a very hearty vote of thanks.

TAIERI.

The first annual Field Day of the Taieri Branch was held on 14th February at the apiary of Mr. W. Clark, Mossiel Junction. The weather was excellent, though it grew a trifle dull towards the close of the afternoon. We rejoiced in an interested gathering of some 70 visitors—creditable for these parts. Field days are Field Days the wide world over; therefore we shall not bother with troublesome detail.

Once finished with the usual ceremony of welcome to the gathering and introduction of distinguished visitors, we proceeded to business.

Mr. E. A. Earp, who dropped in as a most welcome surprise packet, delivered an opening address on the industry, its expansion, and its possibilities. He was seconded by Mr. J. Rentoul, who added a few opinions on the same lines prior to setting before us his system of swarm control. We were interested, to say the least. We can safely assure him that there will be no more swarms in the district between Dunedin and Milton.

All practical demonstrations and manipulations were in the hands of the local "boys." Our host, Mr. Clark, made a speciality of queen introduction and uniting.

Afternoon tea was followed by an address by Mr. C. F. Ryland on the H.P.A.; its history, its functions, and its prospects. Previously we thought, one and all, that as beekeepers we know something of the organisation, but now—! His remarks were forceful and illuminating to all, were they commercial or amateur beemen. Here we know he has generated an interest in the "Imperial Bee" that will not wholly die, that will surely bear results. May he do the same from Bluff to "Waipukarooster!"

The remainder of the day was spent mostly in the honey house, where most extracting appliances were to be seen in action.

Our thanks and our gratitude to visitors who contributed to our programme, and especially to our host and his wife who toiled in our interests. To the public: If there lacked anything at our Field Day, if we failed in anything, or in aught were remiss, pray hold us excused. This was our first attempt. While we live we learn. Come next time and see!

BASIL H. HOWARD.

Entre Nous.—Field Days are a pest, my affidavit on't! Further, false pride is anathema! 'Twas long ordained that a secretary of a Branch should at least, for purposes of prestige, go veils in public at Field Day. And here I am typing, with my left eye the colour of plum-duff rind and the size of a burbank! Servia right!

[Good for you, Basil!—Ed.]

TARANAKI.

We are experiencing some really good weather now, and although late in coming, it will materially increase the crops.

Extracting is hung up all round on account of tins being unprocureable. I had a neighbour beeman to see me to-day. He wanted to borrow a few tins, but when he had a look in my tanks and saw the honey nearly granulated, he did not push his request.

A subject that will need discussion at Conference is sugar. Unless we Taranakites can get at least three-quarters of a

ton of sugar per 100 colonies in the spring, we may as well give up beekeeping. I think if the Government were approached, they would do something for us in the case of a similar shortage to the present one.

Crops, generally speaking, will be from fair to good throughout the district, and the quality is very fine, clover having been fairly plentiful, and thistles not so numerous as usual.

H. R. PENNY.

Okaiawa, 16/2/20.

Canterbury Tales.

By E. G. WARD.

Canterbury ought to be proud of its climate if the abnormal weather conditions of the present season is a matter to boast about. We have just broken another record, and if we keep at it there will not be any left for next year. Our last effort in the line was right in the middle of January, when we had a fall of snow over the greater part of the Province. Then there was a very cold snap between the 14th and the 16th, and on the 15th there was quite a heavy coating of snow on Cashmere Hills. Since April of last year to January of this, snow has been recorded on some part of the Plains every month. Snow has never before been recorded on the Cashmere Hills in January, so I think we are fairly entitled to 'the cake.' I do not think we have had three consecutive good honey gathering days all the season. February weather up to the time of writing is an improvement, and with me has been very favourable for queen-rearing. There is a nice showing of second growth clover, and a gentle contented hum among the hives in the warmer parts of the day. I have particularly noticed that all honey flowers are much later than usual. Gums were fully three weeks longer in bloom than usual, and thistles were about a fortnight later than usual coming into bloom.

I have not yet finished extracting, but by the time these "tales" appear in print I hope to be pretty well cleaned up. As estimated last month, my crop will not be more than two-thirds of that of last year.

I was visited on the 31st January by Mr. Bray, who brought with him Mr. Prater, of Pender Bros., West Maitland, New South Wales. We spent a very pleasant hour or so talking "shop," and I picked up one or two good "pointers," as the Americans say, in the course of conversation. Incidentally, I may say Mr. Pender is on the side of the half-super user, but is opposed to the use of queen-excluders. Mr. Bray also does not use queen excluders, but "yours truly" has had an experience this year which has convinced him that he will never work without them if he can help it.

If I were to give you the details of my experience, I shall probably be told by the opponents of the excluder that the fault was mine, so I will keep quiet just now; but I would like to hear the subject debated (say, at next Conference), and give my experience and the reasons for my preference when the subject is discussed.

Yo Editor's reminder that there is to be a competition for honey at next Conference rather took me by surprise. I do not remember having seen mention of it before, but to save further trouble will plead guilty to a bad memory. May I suggest that in future a schedule be drawn up and published in the Journal early in the season, and that if funds allow that the competition be of a comprehensive nature.

I am glad to see that brother Jones' dream has come true. Keep on "dreaming," brother, and I may be able eventually to square accounts with some of the kind friends who have been giving me "fits" because the H.P.A. has not paid out so much as the highest quotations published occasionally in the newspapers.

Brother Penny, I am on your side on that colour question. I find the bright yellow bees are dabsters to sting in most cases and indifferent honey gatherers. Too much of the Cyprian blood in them, I suppose.

Look here, Mr. Drone! I do not want to tread too heavily on your corns, but I am beginning to think a little "stimulation" would be of benefit in ridding you of that "tired feeling." Please light your pipe and fill it with this reflection. "What would the price of honey be if there was no H.P.A.?" or "What would be the result if all the beekeepers in the Dominion were troubled with the same complaint?"

Correspondence.

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

APIARY SITES CONTROL.

(TO THE EDITOR)

Sir,—Re the above. I was, I can assure you, considerably astonished on reading last month's Journal to see your suggestion "to let the matter drop." Not one of the critics has managed to read those six clauses right. On your own showing, more space has been devoted to this subject in the Bee Journal than any other. Why? Most assuredly there is some solid reason. Are we, as live members of this Association, to sit supinely by until it becomes a common practice, clasp our hands and gurgle, "Gentlemen, nothing can be done!" and possibly wink the other

eye? Not being at the last Conference to see for myself, my impression, after reading the full report was that a majority of the members demanded that something be done. Something has been done, and the pill seems rather bitter to some folks. This seems to be the only solution of a very difficult and very important matter—viz., let the Association govern its own members. Mr. B. Millar is slightly mixed up in the clauses. His answer is in my article of last month. I would also hasten to assure him that the Committee wasn't drunk at the time; in fact, I believe that I am the only one who is not a teetotaler. It is many years since I was loaded down to the Plimsoll mark. As regards the three gentlemen of the Department, I think it is an insult to their intelligence if they are included.

Before going any further, may I call your attention to what Mr. Horn pointed out to you—that it was the intention of your Committee that those six clauses be submitted to the Executive of the National Association for discussion and amendment first. Instead of this we have a lot of people misinterpreting the whole thing, and publishing it broadcast over New Zealand. This is not the way to foster industry, increase production, nor forward the common interest of the whole Association. Now we have Mr. Sage telling us that he does not indulge in extreme lines of meditation.' Neither do I, my son; I haven't the time, for this reason: ambition is one of the most predominant characteristics of my whole make-up, and I also have the ability, experience, and courage to keep my end up without leaning on a degenerate, socialistic Government for support. Mr. Sage seems to have got slightly bogged also in the six clauses. Say he wishes to start another out-yard. Turn to Clause 5, which seems to be bothering him:—

The Executive of the National shall examine the site, and if in their opinion there is room for another apiary, &c., &c.

Now, on the site chosen, or a-quarter of a mile away, Jones is running 30 colonies of a sort, with or without foul-brood. In the opinion of your examining Committee this location will carry 100 colonies. Is the Committee to turn this applicant down because Jones is already there? No, Sir, they will not; by doing so they would retard the development of the industry. As possibly Jones, Smith, Brown, or whoever he may be, with his 30 undesirable colonies of blacks possibly, is not making full use of this location, any intelligent bee-farmer is justified in making full use of what otherwise would be wasted—the natural wealth of the State."

On the other hand, an up-to-date intelligent bee-farmer has this location fully stocked with first-class bees, and is making full use of same, "to the best of his ability and experience," then common sense will tell us there is not room for another apiary, however ambitious the

apiarist may be. That requires no meditation to see.

Take another case that actually happened. A has on a second-rate location 90 colonies of as fine a strain of Italians as is in New Zealand; B dumps 30 colonies of blacks a-quarter of a mile from him, foul-broody, combs built on starters, as he cannot afford full sheets of foundation. Will this increase production or develop the honey industry? As I understand it there are quite a lot of B's in New Zealand. Amongst commercial men I should think their common sense and self-respect would prevent them from dumping. At the same time, those six clauses were framed, as I have stated, for the betterment and development of the honey industry and prevent unscrupulous persons from dumping where and when they choose. I pointed out over twelve months ago that we may say farewell to the National Association if its Branches become full of warring elements who are jumping each other's claims.

Finally, Mr. Sage's letter is a complete answer as to why those six clauses should become law.

I had a fire down at my old Wai Tapu yard, and have been busy clearing up and straightening things out. My ambition at present is to finish it to-morrow; I believe I have got the ability and experience to do so.—I am, &c.,

R. H. NELSON.

Martinborough, 12/2/20.

(TO THE EDITOR.)

Sir,—I had thought to let Mr. Bartlett-Miller's hot (and as a correspondent remarks insulting) remarks go by the board without notice; but as I wish to make some criticism on Mr. Sage's letter, I could not refrain from dealing somewhat with Mr. B.-M. also. He says that he does not know any one of the Committee. I cannot see how that can be if he has read the Journal. The greatest part of his letter is taken up ridiculing that clause which says that if a bona fide farmer desires to become an apiarist and gets a license, such out-apiaries as are within a certain distance of him shall be given notice to remove within a given time, provided he is not a freeholder or leaseholder. He calls the Committee all the evil names he can conjure up for this absurd clause. I may inform Mr. B.-M. that not one of the Committee suggested this clause, and that I personally was very much against it. But it was forced upon us by the Department. He calls us a haphazard Committee, meaning by that, I suppose, one of not much worth or account. Yet I have not the slightest doubt that all of them are of as high a standard of mentality as Mr. B.-M. himself, if not greater. He rails about the Branches not having an opportunity to discuss the matter, while the fact is they will have twelve months to discuss and propose amendments if they so wish.

As regards Mr. Sage's letter, his plan is to set up a man of straw and then knock him down, and so lead you to suppose that he has knocked the bottom out of the matter under discussion. But his man of straw is not the man at all, but purely his own imagination. He gives as an instance a man whose ability has extended beyond his home apiary, and he wants to establish out-apiaries. The law, however, prevents him, because there are other beekeepers within the radius, so he has to go many miles from home, where conditions approach the impossible. All the conditions of this supposed case are exaggerated beyond measure, and therefore do not apply. Then with regard to established apiaries and persons wanting to establish them. The first he classes as lacking ability, skill, and ambition, and the latter as possessing them all, and draws his conclusions from that condition of affairs. If that is not putting up a man of straw, I do not know what is.

Mr. Sage, in common with all opponents of apiary boundaries, has nothing better to suggest than the survival of the fittest. That old prehistoric law, when savage beasts inhabited the earth, when the fittest was the one with the sharpest teeth and the longest claws to rend and tear his opponents. Courts of Justice, police, &c., are devised to prevent the survival of the fittest—that is, the strongest and most savage bully—and to adjust disputes on lines of justice and not of force.

Surely there is some way of regulating apiary boundaries other than that of British fighting, which is wasteful in the extreme. I would suggest that the matter be held over until Conference, and then decided.—I am, &c.,

A. IRELAND.

Ellesmere, Feb., 1920.

[The above was received after our remarks had been written.—Ed.]

(TO THE EDITOR.)

Sir,—I beg to differ from your editorial, and since I do so, you must, of course, be on the wrong side of the question. The agitation started for the defining of apiary boundaries because several beekeepers had suffered; and if only one had suffered, or even had been threatened with such a thing, it would still be the duty of the State to legislate. The idea that no legislation is necessary because there is not a continual squeal of sufferers being heard, who probably are too busy just now getting their crop in, is altogether too glorious. And the whole beekeeping world is looking on deeply interested, and the Government is satisfied that there is a necessity and is willing, and here we are to say: we are a lot of empty-headed bee-muddlers; we do not know what we want; and we thought we were hurt and we were not; please give us a good smacking and put us to bed. And what about the beekeepers all over the world who are anxiously watching and wishing us God-speed? No one

expects a perfect law with one slap, but a just, pliable measure, to be added to or to be altered as it may be found necessary later on. And there is another point to be considered: such a measure cannot be costly, and yet it is sure to be of incalculable benefit in combating foul-brood, in which we surely, all of us, are most intensely interested.—I am, &c.,

STEPHEN ANTHONY,
Coromandel, 7th Feb., 1920.

(TO THE EDITOR.)

Sir,—As a constant and very interested reader of your valuable columns, I cannot help being struck with the nature and, may I add, inconsistency of some of the advertisements. For months past Messrs. A. S. Paterson & Co. Ltd. have been issuing "A Word of Warning" to beekeepers in regard to their methods of marketing. They state: "We are buyers, but owing to lack of shipping space and congestion of stocks awaiting shipment, we have been unable to buy during the past season." &c., &c. The first thing that suggests itself to any intelligent beekeeper is, I imagine, "thank you for nothing." Any firm is prepared to buy honey for export when the market is good in England and ample shipping is available; but where would the New Zealand beekeepers have been in 1918 if they had been compelled to depend on these sort of buyers?—"we'll take your honey when it suits us, but only when it suits us" sort of business; "when there is no shipping available and you require someone to finance you you can let the other fellow have it." These friends (?) of the producers declared they would not buy so long as shipping was uncertain; that quite easily might have been two years, or even more; now beekeepers are advised not to tie themselves up so that they can take advantage "of the full cash prices." &c. What are full cash prices? Surely the time has arrived when producers of honey might be enlightened on this point. There has certainly been no lack of shipping space for honey during the last six months judging by the quantity that has been shipped.

I notice Messrs. Taylor & Co., of Liverpool, quote Chilean Pile X at 84/- and Pile 1 75/-. This honey for all commercial purposes is equal to the average New Zealand. Now, taking this as a basis, what will our friends pay for New Zealand light and medium amber B grade f.o.b. Auckland?—I am, &c.,

ONE INTERESTED.

(TO THE EDITOR.)

Sir,—In your Journal about a year ago I observed a good deal of writing concerning sweet or Bokhara clover for bees, forage, &c. Being a curious sort of a chap, I determined to try some for myself, so I secured a pound of seed and set to work to grow sweet clover. I was very busy at the time, and I scratched the grass away from the headland corner of a maize paddock, threw the seed down, raked it

over, and left it to take its chance. About two or three days after I received another Bee Journal, where an expert in sweet clover told us how to go about sowing the seed, which was just about as much difference of the poles to the equator as to how I did my bit, and I was wondering how my bit of seed would get on, when I was electrified one day to see the patch which I had sown quite green. I thought it would die, but I left it there and did nothing to it—no weeding or cultivating; it just had "Buckley's chance." This year it has outgrown everything it is near to; it is over 7 ft. high and covered with blossom, which the bees evidently have a great liking for, for on a sunny day it is literally alive with bees. The cattle appear to have a hankering for it, too, judging by the way it is eaten close to the fence where the cows can reach the clover. Judging from my experience with it, it does not require any experimenting with or any extra sort of work. The ground I threw into it was river silt, rather sandy, and thick with Indian Dough grass, but that grass has no show against it.

In one of your last issues, you were appealing for fresh subscribers. I have interested a friend in the Journal, and gave him a form to fill in. I hope he has done so. If every subscriber would get at least one new subscriber every year, I guess we would get on better. Wishing you every success,—I am, &c.

E. E. TATAM.

Whakatane, 1st Feb., 1920.

(TO THE EDITOR.)

Sir,—The Marlborough beekeepers were favoured with a great treat here on the evening of January 25th. We had Mr. Ryland, M.N.Z.H.P.A. What a lot of letters to one's name! However, as the Yank says, "he's a good looker, and deserves it." Now, the letters mean that Mr. Ryland is manager of one of the finest co-operative organisations in New Zealand; but hold on! You know our beautiful liner was registered to leave Wellington for Picton at 12.15 on January 26th, but I think the cooks got wind that there was a gentleman aboard with letters to his name; they must have decided that they "couldn't do it for the money," and so got out of it until after the passengers had had their dinner ashore, the boat eventually arriving in Picton at 1 a.m. However, Mr. Ryland arrived at the meeting to time, fit and well. All through the address on the business and policy of the H.P.A. one was struck with the wonderful and thorough grasp Mr. Ryland and his Board have of the marketing of honey, and the general needs of the honey producer. His remarks prove that even the most minor detail receives very careful consideration, and makes one feel that the business is in good hands. For the H.P.A. to become such a fine organisation in five short years throws great credit on the previous and present management. Of course, there is always someone who will say this or that should

be done, but I say right here that one cannot listen to Mr. Ryland's remarks and not be convinced that he has a whole lot up his sleeve; and once let the honey producers as a whole give him the confidence he deserves and join up with the H.P.A. right away, the sooner will the beekeeper enjoy the privileges now denied him. All present enjoyed Mr. Ryland's address very much, and verified it by passing a very hearty vote of thanks. When the speaker sat down it seemed there was only one of two things for the honey producer to do—to link up with the H.P.A. right away, or go and interview his doctor," or, as the schoolboy would say, "get yer head read!" Hoping I may not have intruded too much on your valuable space,—I am, &c.,

R. G. DOYLE

Blenheim, 28/1/20.

(TO THE EDITOR.)

Sir,—It might be interesting to members of our craft to know that honey in Britain, and especially in and around Glasgow, is selling nowhere less than 3/- per lb. Such was the case three months ago according to my neighbour, Mr. G. Clarke, who has just returned from a trip Home, and is absolutely trustworthy. Mr. Clarke has been beekeeping many years before selling out to me, and was naturally interested in the honey market. He visited more than a dozen stores. You will understand his smile on my information that our share last year has been 5d., with the recent promise of ½d. (1) bonus to come—pardon! perhaps another whole farthing in March. Our last circular does not close the door on such high a hope as this. Who gets the difference? It is all very well to talk of our combine having doubled the price of honey; that is all cant. Honey went up for similar reasons as other commodities. We certainly stopped local "sharks" getting the benefit of this rise, but that was all. The question is: Do we intend the benefit we derive from our Co-operative Association to end here? If so, good. Our Association is all that can be desired. If not, let our directors find means to go some steps further. I am personally quite satisfied with 8d. to 9d. per lb., and I would not like to be a member of an additional profiteering concern, having, like the majority of us, denounced this class so much of late. But I certainly object to others making 200 to 300 per cent. out of the proceeds of my labour. It is all very well to say that our affairs are being handled well in England. It may be so, but if you hear of honey selling at 3/—and what's more, know it's absolute truth—you become a bit sceptical whether Major Norton's explanations constitute the last word in the matter. I certainly know there are great difficulties in trying to avoid exploitation, and will make ample allowance. But we must not delude ourselves into believing that our arrangements (or those of the B. and D.) cannot be improved upon. I think there are more than one means to

get upon. We know that wool and other commodities are being re-exported to Europe. Or we might get into touch with those genuine Co-operative buying Societies of consumers which thrive so successfully in Scotland, and are becoming such a power in other parts of England and Europe. In the latter case we would at least have the absolute guarantee that no juggling for profits takes place with our produce. I think discussion on this point should be encouraged. It is a vital affair. And I do not think that the B. and D. need look upon any healthy proposal or criticism as an expression of annoyance or distrust.

There is one item on which some readers might give enlightenment. I was under the impression that for our 1918 crop an advance of 9d. f.o.b. was guaranteed. We received 8½d., and there was talk of even repaying ¼d. What was the good of the guarantee?

I would like to see the H.P.A. tackling the question of sugar supplies. There is the greatest uncertainty for next spring (seemingly), and we could best solve the difficulties by approaching the Sugar Company (or the Government) in a body. It seems ridiculous that we are going in for beekeepers' supplies and omit sugar! Our Association should be able to obtain several hundred tons at a considerable rebate. I would suggest that every beekeeper should place a definite order with our management and authorise it to keep back enough out of this year's cheque to cover the purchase. I intend to approach Mr. Ryland with the idea, and would like to see the opinion of other readers expressed in our columns. Mr. Ryland would only have to make some very definite arrangements. We cannot afford to be handicapped like we have been with honey tins this year. I have been compelled to suspend extracting operations, and can get no information when the bulk of my tins can be expected. I hope my brother beekeepers have had better luck.

About queens mating inside the hive, I have at least a dozen cases this season. I have no other explanation for the fact of these queens starting to lay above the excluder. I put my bees on foundation to retard swarming. The brood-chamber is raised to the top (honey super between). Now, with one batch, bad weather and other things prevented me from cutting out queen cells after ten days. In some cases the bees swarmed, in some nothing happened, and I have also 12 January queens who started operations above, the old queens in every case still going strong below. Mating must have occurred inside, or the virgins have passed twice through the excluder, which seems to me very improbable. Anybody wanting these queens to experiment with can communicate with me.

Regarding apiary boundaries, I think the right course has been taken in letting the matter drop, as there will be thousands of far more pressing problems to be handled by Parliament for many years to come. Mr.

Sage's remarks are very interesting, and certainly open up another aspect of the position. I agree with him for the present. But if in years ahead our industry doubles and troubles, we ought to come back to the matter. Perhaps by that time the National has, for convenience and for efficiency's sake, been transformed into a guild, with the right and power to itself to regulate all questions concerning its own affairs without having to trouble the whole cumbersome parliamentary machine. We would then be able to overcome even such difficulties as Mr. Sage puts forward. For only then could every case be handled individually by a board of self-elected beemen. From none but such, if I had a grievance, would I care to seek redress; and with a bad conscience, before none would I less like to appear. What can a J.P., a judge, or a M.P. possibly be expected to know of beekeeping? Guild socialism, Mr. Sage! I wonder if you believe the motives underlying the H.P.A. to be so degenerate? They are purely socialistic. Co-operation and Socialism are identical words. It seems as if not every beekeeper has thought much about the nearly perfect Socialism of his beehives!—I am, &c.,

H. STOCKMAR.

Mangatera, 19th Feb., 1920.

Answers to Correspondents.

F. C. P., Mangatoitoti.—Well-filled combs of pollen are of the greatest use in the spring; in fact, we have seen it stated that they are of more value than honey in districts where the pollen is scarce at that time. To keep the pollen from drying out and thus becoming useless, put them with your store combs of honey on the strongest hives, keeping an excluder over the brood chamber.

F. P. L., Hawera.—For some reason most of the experiments of using honey for cooking in place of sugar have not been a success. In any case, with honey retailing at about 1/- per lb., it is out of the question to attempt to substitute the one for the other.

We cannot all specialise in queen-rearing, and, if we could, our strain of bees may not be worthy the necessary trouble. To depend on the maintenance of a good strain by leaving nature alone, is trusting to luck, and to depend upon the improvement of a strain by the chance fertilisation of our young queens by the drones from the apiaries of our more progressive neighbours, is unreliable and unsatisfactory. In bee-breeding, as in breeding other live stock, fresh blood should be imported periodically, and when doing this we should take such steps as are available to secure the best our pockets can afford.—The Bee World.

Beekeepers' Exchange.

ADVERTISEMENTS on this Page will be inserted at the rate of 3/- per 36 words per insertion.

NOTICE TO BEEKEEPERS.

I have ESTABLISHED an Apiary on the Ngarna Road, Kaihere, and am Establishing an Out-apiary in Patetonga.
N. J. BOWMAN.

NOTICE TO BEEKEEPERS.

I am ESTABLISHING a Commercial Apiary on Mr. Geo Stewart's Land (Springburn), near Orari, South Canterbury.
J. MAITLAND.

NOTICE TO BEEKEEPERS.

I have COMMENCED Commercial Beekeeping in Otorohanga, and District.
WM. HEALD.

1919-20 PRICE LIST OF ITALIAN QUEENS

PRICES:

	1	2	3	4	5
Untested	7/-	12/6	18/-	23/-	27/6
Select Untested—1/- extra per Queen.					
Tested	12/-	21/-	28/6	37/6	45/-
Select Tested	15/-	28/-			
Breeders	25/-				

Queens guaranteed free from all disease, and bred from Pure Stock, which have been selected for hardiness, disease-resisting, good-working & non-swarmling qualities.

Ninety-five per cent. of Untested Queens guaranteed purely mated.

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

P.O. Order Office, Tapanui.

Tested Queens for delivery from October 20th; Untested from about November 20th to end of March, 1920.

NOTE.—Owing to high cost of all material, no reductions can be allowed on list prices for larger quantities.

POSTAL ADDRESS:

R. STEWART, CROOKSTON, OTAGO.

DO NOT WORK WITH OBSOLETE KNIVES.

HAGERTY'S PATENT No. 40726 STEAM CAPPING KNIFE.

IT IS A PLEASURE TO THE APIARIST.

Steam Knife, complete with Can and Tubing,
posted to any part of N.Z. Price, 40/-

Can and Tube, 5/- extra.

Or send your Bingham Knife,
and I will convert it for you.
Price, 30/-

Workmanship Guaranteed.

WILLIAM HAGERTY - Electrician - WINTON.

BEEKEEPERS!

You Know what it is to Work with a bad Melter.

GET THE BEST THAT IS OFFERING, AND YOUR WORK WILL NOT BE SO UNPLEASANT.

Buy one of Smedley's

AND END YOUR TROUBLES, AND BE RIGHT UP TO DATE.

My Melter is the result of Time, Experience, and Money, and I GUARANTEE YOU SATISFACTION: in a word, IT IS THE BEST IN NEW ZEALAND. I know what I am talking about, and want to convince you of this fact. There is no "brag" about this. Just consider the following advantages over any other Melter:—

1. The small tubes between the large revolve or turn upside down when you wish a clean surface. These are supplied with steam—not false bottoms between the tubes to control spacing, but a hot tube, that you can space from 1-16th of an inch to ½-inch, as you desire. And remember! you have two such escape spaces between every two large set tubes.
2. The Melted Wax and Honey drop from the tubes through cool air (not confined hot air), and the honey is not held in a large body. The bottom of any pyramid-shaped tray cannot hold much honey, it is designed to escape slowly at the first, when the tray is cool and holds back the wax, so that none

can leave this tray or separator. As the wax and honey increase, the flow of honey increases accordingly. (I did not show this at Rukara, as it is being protected.) When the wax reaches above the wax spouts, you draw it off into moulds, and it is ready for market. Not slow-running spouts that cool off as fast as they run and do not mould properly. The slumgum is now left in the tray, this being removable for emptying.

3. You need no other Separator with this Melter if you use a settling tank; if not, you have a bucket with a spout from bottom to top (inside or outside) as a refiner or gravity strainer. As a Capping Melter it has no equal; as a Comb Melter it is ready to meet any demand.
4. This is the Melter for Beekeepers with 150 Hives and upwards, it being necessary to have a good pressure of steam to supply this Melter and Steam Knife, and such Beekeepers should have a good supply of steam for other purposes if up to date.

TRY ONE OF THESE MELTERS FOR TWO WEEKS ON A FREE TRIAL.
YOU'LL BE SATISFIED.

WRITE FOR FURTHER PARTICULARS AND TERMS.

C. SMEDLEY,

Te Awamutu.

To fill a long-felt want amongst smaller Beekeepers, I will soon bring before your notice a suitable Melter—that is, the Boiler and Melting Service are one. It will turn out of the shed the surplus heat, and be very economical in fuel, as it will do excellent work with very little water. It will be different to every other Melter, yet with the same good points as above.

ALL MELTERS ARE MADE BY A GOOD TRADESMAN.

UNIQUE POINTS

in the

BARTLETT-MILLER REDUCERS

1. You can obtain a size to suit your pocket and your business—there are five of them.
2. The BARTLETT-MILLER REDUCER is self-contained, there being no loose parts, and there is nothing out of sight or reach.
3. You can regulate the heat of your honey before it leaves the Reducer. No other Reducer has such a feature.
4. You can get at every part of the Reducer without the slightest awkwardness—everything is straight in front of you and open to view and hand.
5. BARTLETT-MILLER REDUCERS have a much larger heating surface than any others, and so do faster work than any other Reducer ever invented.
6. Only in the BARTLETT-MILLER REDUCERS can the operator open the spaces at the bottoms of the tubes—WIDE OPEN,—and clear right down. This is being patented.
7. Only the BARTLETT-MILLER REDUCER delivers the slumgum on a tray, ready for removal as often as desired, and entirely separated from the honey.
8. The BARTLETT-MILLER REDUCER is the only one invented that keeps all slumgum entirely away from all honey after it has once left the melting surfaces. This is extremely important.
9. The BARTLETT-MILLER REDUCER is the only reducer in which you have no slumgum to shovel away when you have finished your day's (or hour's) work. The solid matter last left in the tube spaces just drops on to a screen, placed there for the purpose, and this screen is withdrawn and dumped wherever desired. The Reducer is then bare and clean, and there is no further dripping of anything.
10. The BARTLETT-MILLER REDUCER was first invented among those now on the market, and first it is going to stay!
11. The BARTLETT-MILLER REDUCER is the only one that does not need large pieces of pollen-filled comb being pushed out from between the tubes. They one and all fall out as soon as the bottoms are lowered.
12. The BARTLETT-MILLER REDUCER is the only Reducer that provides for each tube space being emptied singly. Others empty all at once, or none, and some do not empty at all.
13. The BARTLETT-MILLER REDUCER is the only reducer which can be so regulated as to prevent unmelted cappings from slipping through in one tube space, and yet permits AT THE SAME TIME big lumps of pollen and slumgum to go through in any other tube space or spaces.
14. The BARTLETT-MILLER REDUCER is the only reducer with so large a heating surface that honey holding too much moisture can have that moisture safely and satisfactorily reduced by putting it through the Reducer. (Special tube fillers are supplied extra for this work.)
15. It is the only reducer that, by reason of its tall tubes, is satisfactory to use in reducing to liquid state for re-tinning any candied honey.
16. It is the only Reducer which caters for different tube depths, as needed, for its special requirements.
17. BARTLETT-MILLER REDUCERS are procurable with tubes from five inches to nine inches in depth.
18. Lastly, it is the only Reducer that is selling so well that the manufacturer makes this monthly two-page advertisement pay—AND NO WONDER!

It goes Against the Grain.

I much regret that I am compelled to raise the prices of all the B.M. REDUCERS but the rise is compulsory if the business is to pay.

I have introduced into my business the new American method of "costing," which is the most perfect plan of finding out whether any particular line of manufacture is rendering a profit or not upon its manufacture. Many lines of business are nowadays run at either a loss or at so small a profit that it does not pay to carry it on.

The REDUCER BRANCH of my business was one such. When I and the expert had concluded our investigations, we conclusively proved that I was making only one and three-eighths per cent. profit upon my turnover, and nothing at all for my own labour.

No Beekeeper wants a brother vociferous to supply him with the apparatus of his Extracting Room at such a worthless margin of profit as this. As a class, Beekeepers can never be accused of innate meanness; on the contrary, they are rather noted for large-heartedness, and I feel sure that if I let down my prospective customers by giving them a full month's notice of the necessity for increasing prices, they will appreciate the endeavour to meet them halfway in a matter that is as irksome to the producer as it must be to the purchaser.

That being the Case

PRICES FROM THE 7th MARCH (a month ahead of which date will about see the Journal in each subscriber's hands) will be as follows:—

"Baby" will be £4 10 instead of £4 0 0		
"Booster" " 5 5 " 4 12 6		
"Boon" " 6 6 " 5 10 0		
"Effective" 10 0 " 8 15 0		
"Glutton" " 15 10 " 13 10 0		

NOTE.—NONE OF THESE ADVANCES WILL APPLY TO MACHINES FOR THE SUPPLY OF WHICH QUOTATIONS PER MAIL HAVE ALREADY BEEN MADE. ALL SUCH WILL BE SUPPLIED AT THE PRICES QUOTED AT THE TIME OF ENQUIRY.

FURTHER.—IT MUST BE DISTINCTLY UNDERSTOOD THAT DELIVERY CANNOT BE MADE EARLIER THAN FIVE (5) WEEKS AFTER RECEIPT AT THIS END OF YOUR ORDER. WE ARE WORKING NOW OVERTIME & HOLIDAYS TO EXECUTE ORDERS, AND ARE AT OUR WITS' END TO OVERTAKE THEM. LABOUR IS ALMOST AS SCARCE AS ANGELS' VISITS, AND PRICES OF EVERYTHING THAT ENTERS INTO OUR WORK ARE SOARING EVERY DAY RATHER THAN SHOWING ANY TENDENCY TO A REDUCTION IN PRICE; WHILE DELAY IN OVERSEAS ARRIVAL OF IRON IS A FURTHER CAUSE OF SLOW DELIVERY.

H. BARTLETT BARTLETT-MILLER,
Thoroughwork Apiaries,
KIHIKIHI.

Honey for Export

WE ARE CASH BUYERS

Of New Zealand Government Graded Honey,
packed according to Regulations, at

FULL CASH PRICES

equivalent to the highest values obtainable in
the Overseas Markets.

Payments made within 48 hours of the
time the Honey is graded.

Write, telegraph, or call on us for further
particulars.

A. S. PATERSON & Co., Ltd.,

No. 1 Custom St. West, Auckland.

Telegraphic Address—'ASPASIA,' AUCKLAND.

OUTBREAK OF HOSTILITIES

A Warning to the New Zealand Beekeeper.

Mr. BEEKEEPER,—

For a short period during the War some large New Zealand firms of merchants **speculated** in Honey, and offered high prices in order to tempt the producer to support the **private speculator** as against the **co-operative movement**.

These high prices were withdrawn **in a few weeks**, and the firms in question made heavy losses over the transaction, and this has kept them out of the Honey Market for a year or more. Now they resume hostilities, and are offering to buy New Zealand Honey for export at prices which, on present English and Foreign Market Values, **must involve them in considerable loss**.

WE ASK YOU: Is this move in **your** interests, or is it a challenge to the co-operative marketing movement?

Will the speculators stand by the producer all the time (last year they lay low and laid plans), or are they for themselves **all day and every day** "world without end, amen"?

Be wise, Mr. Honey Producer! The welfare of the industry lies in the co-operative movement, and the present profitable prices are the result of the birth and operations of **The N.Z. Co-operative Honey Producers' Association Ltd.**

Therefore, **safeguard your own interests**, and help us to help you by marketing your Honey through the H.P.A.:

We return you **ALL** the profits, and our Organisation is in a position to obtain the maximum price for Honey.

New Zealand Co-operative Honey Producers' Assoc., Ltd.,

C. F. RYLAND,
General Manager.

Head Office :
Stanley Street, AUCKLAND.

"Alliance" Honey House Equipment.

The honey flow is now in full swing. Before extracting time overhaul your machinery and see everything is in order. The following lines are the best of their kind:—

ROOT AUTOMATIC BALL-BEARING EXTRACTORS. Nothing to equal them. Absolute satisfaction guaranteed.

UNCAPPING KNIVES. Bingham, the Standard, and Lea Steam Heated. Always piping hot.

BAINES' CAPPING REDUCERS. Disposes of the cappings as fast as they fall from the knife.

HONEY PUMPS Will lift the Honey to the storage tanks, saving heavy laborious work.

We have large Stocks of the finest Comb Foundation in the world.

SEND FOR A COPY OF THE NEW ILLUSTRATED CATALOGUE.
It will be posted free on request.

ABC and XYZ of
BEE CULTURE.

ALLIANCE BOX CO., Ltd.

We are booking orders for the 1919 Edition of this standard work. The first shipment will arrive within the next few days.

MASON STREET - DUNEDIN.

Early application is desirable.

1919-1920

PRICES OF ITALIAN QUEENS.

One or Two.
7/- each.

Three or Four.
6/- each.

Five or more than Five.
5/6 each.

Colour Range of Workers Guaranteed Leather Three-banded to Golden Four banded.

TERMS.—Nett cash with order; Cheques to have exchange added.

Any Queen arriving dead replaced free if cage is returned unopened.

NOTES.—Experience in this district shows that it is risky to introduce fertile Queens while swarming cells are general in the hives. Many are killed by the bees, and the majority are reduced to the size of virgins, not being fed by the bees or allowed to lay for many days. Some Queens during this period are ill-treated by the bees, and, though eventually accepted, may be injured. Before and after the swarming season most Queens are accepted at once, and laying freely very soon after being liberated from the cage.

In addition, Customers can rely on getting the very best of Queens after the general swarming season is over.

All Queens reared from carefully picked Breeding Queens, in hives specially selected for the building of good queen cells, no such hive being allowed to feed more than 16 cells at a time.

No Queens from indiscriminate swarming cells are sent out.

POSTAL ADDRESS:

J. H. TODD, Renwicktown, MARLBOROUGH.