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

5. a. sa

The New Zealand

Beekeepers' Journal.

Vot. 5

JANUARY 1st, 1921.

No. 1.

Subscription: 6/= per Annum in Advance.



Apiary and Orchard of Mr. T. H. Clarke, Mangapiko, Te Awamutu.

ISSUED MONTHLY

THE NATIONAL BEEKEEPERS ASSOCIATION OF N.Z.

Jan. 1, 1921.]

Spring is Coming.

BE PREPARED!

Prices for Italian Queens and Nuclei, 1920;

Untested Queens to November 14th, 10/-; after November 14th, 7/6 Each, £1; ", ", 15/-," 15/-,

Tested Nuclei with Untested Queens to November 14th, Three-frame 30/-

Safe Arrival Guaranteed. All Orders Supplied in Rotation.

TERMS.—CASH-WITH ORDER. CHEQUES TO HAVE EXCHANGE ADDED.
Money Orders payable at Rangiora Post Uffice.

Postal Address: M. SHEPHERD, Southbrook, Canterbury.

NICHOLAS' FOUNDATION FACTORY.

BEESWAX WANTED in Large or Small Lots. Highest Cash Price Paid.

Foundation Comb at Lowest Cash Price.

The capacity of our Electric Power Plant has been greatly increased, and the adoption of the latest methods, combined with years of experience in making Foundation Comb, ensures a product unsurpassed by none.

dation Comp. ensures a product measure product of the Waikato, writing 15th Oct., Mr. Bartlet-Miller, the well-known Beekeeper of the Waikato, writing 15th Oct., 1200, says:—"Your Foundation came to hand yesterday, and is precisely the same thing as the A. I Boot Oo," &c.

Customers among the leading Beekeepers of the Dominion.

NICHOLAS, 3 CALEDONIA ST., HAWERA.

Don't Forget

Our Store when anything is wanted in the shape of

BEE MATERIAL.

Full supplies of all Beekeepers' Requisites kept in stock. Honey Tin Manufacturers. Agents for Alliance Box Co. and for Benton's Capping Melter.

REMEMBER! If it's for Bees, we have it.

H. BEALE & CO., LTD., PLUMBERS, TINSMITHS

P.O. Box 129. 'Phone 62.

MASTERTON, WAIRARAPA.

BAY OF PLENTY COMB FOUNDATION FACTORY

BEESWAX WANTED IN ANY QUANTITY TO KEEP OUR MODERN FOUNDATION FACTORY GOING.

WE ARE OFFERING 2/6 PER LB. SPOT CASH, OR WE WILL MAKE YOUR WAX UP FOR YOU AT 8d. PER LB.

Excell & Hallam,

Comb Foundation Makers,

WELLINGTON, NEW ZEALAND

The New Zealand Beekeepers' Journal

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

Vol. 5 6/- PER ANNUM No. 1

National Beekeepers' Association of New Zealand.

The abject of the Association is the Improvement of the Beckeeping Industry and furthering the Interests and prosperity of the Beckeepers throughout the Domblom. Membership is extended to any Beckeeper who is in accord with the aims and objects of the Association on payment of fees as follows:—1 to 15 Illnes, 50:-1 for 30 Illnes, 10:-1 to 100 Illnes, 10:-1 carry additional 10, 50:- extra.

OFFICE-BEARERS FOR THE YEAR 1920-21.

President: Mr. W. WATSON, Geraldine.

Vice-President: Mr. E. W. SAGE, Ohaupo Executive: Mr. R. McKNIGHT (Domett); Mr. A. H. DAVIES (Pukeroro Rural District, Hamilton); Mr. A. R. BATES (Kaponga); Mr. L. IRWIN (Woodlands, Southland).

Secretary & Treasurer: Mr. FRED C. BAINES, Kati Kati, Editor of Journal: Mr. FRED C. BAINES, Kati Kati.

DISTRICT ASSOCIATIONS AFFILIATED.

Auckland Provincial Branch.-Sec., Mr. A. H. Davies, Pukeroro Rural District. Hamilton. Sub-Branches:

Lower Waikato.—Hon, Sec., —.
Te Araha.—Hon, Sec., C. A. Grainger, Waihou.
Hing Country.—Hon, Sec., Mr. G. Laurie, Rata Street, Te Kulti.
Rotorua.—Hon, Sec., F. E. Stewart, Rotorua.

Canterbury Beekeepers' Association .- Hon. Sec., Miss MucKay, Middle Lincoln Road, Spraydon.

Cantelrury Beckenger's Association.—Hot. Sec., Mis. Michayl, and Lincois woul, spreyum. Sumbhad Beckenger's Association.—Hr. L. Frixi, Woodlands, Sumbhad Beckenger's Association.—Hr. L. Frixi, Woodlands, Christian Lander, Christ

All communications respecting the Association and Journal to be sent to

CONTENTS

1	Page.		Page.
Editorial		Canterbury Tales	
Market Reports			
Beekeeping for Beginners	3	Answers to Correspondents	11
The Marketing Problem	4	Notes on Previous Issues	11
Do Young Hatched Queens Need Royal	1	Subscriptions Received	13
Jelly 1		Beekeepers' Exchange	14
District Reports	. 6		

EDITORIAL.

A HAPPY AND PROSPEROUS YEAR TO YOU ALL.

In a letter recently received from Mr. Jas. Allan, our attention is drawn to the efforts now being made by the Department, in conjunction with the fruit-growers, by a combined effort over a given area for the control of the fireblight scourge now threatening extinction to their industry. He points out that if we could concentrate subject, and see if something on the same our efforts in getting a systematic organilines as the fruit growers' campaign cannot

under the charge of a good man, with the full purpose to clean up that area absolutely, that lots of things would happen. The purpose of every owner of bees would be questioned: thorough registration would be effected; and when the organised effort passed on to the next district, it would leave behind a capable officer to watch for any recurrence of the disease. Mr. Allan is of the opinion that the proposed increase in the number of inspectors will do very little good. An intermittent inspec-tion that does not follow up its own work is absolutely useless. Mr. Allan suggests that we get our readers interested in the subject, and see if something on the same sation going, covering an outlined area, be organised amongst us. He says he has

FRED C. BAINES, Kati Kati,

land that are doing more or less "McEvoysome of them treating every colony just at the time when they ought to be building up their colonies for the clover harvest. There is not only the loss entailed, but it is also a miserable, heart breaking job-all the worse because all these men know there is nothing permanent about it: it is an everlasting fight. As is usual with Mr. Allan's remarks, there is something of real value for us to think about and possibly act upon.

The fireblight business is going to mean the loss of thousands of pounds to the fruit grower; foul-brood disease has meant that to the beeksepers for years, and is The fruitmeaning the same to-day. growers are adopting this attitude: "We are going to find out where the scats of infection are, and we are going to destroy them." We think it is easily possible for the beekeepers to say the same, and we have an Apiaries Act that gives us the necessary power to carry it out. The question to be settled, then, is-How can we get the necessary organisation to do the work? This is clearly a case where the National Association and its Branches have a distinet and necessary work to do, and if the organisation as it exists is not capable, then it is not the use to the industry it should be and was established for.

As a preliminary proposal, we would suggest that the Branches get together and discuss the matter as it affects their particular members; every member to get the names and addresses of those known to keep bees in the vicinity because it is and send a copy to the apiaries instructor for the district, who would find out those that had not registered and get at them immediately. On a certain date-probably when the rush of the season is over-the systematic inspection to start, the personnel being made up by beekeepers whose names are sa sfactory to the Department, these being made local inspectors under the Act for the time being. It could be arranged that each two members could strike in fact, it would be easily possible for a rough map to be made and the different rontes marked out; the whole proceedings to be under the supervision of the apinry instructor for the district, who, of course, has considerably wider powers than the "locals," should it be necessary to buse such power. There can be no doubt that a week or two spent by commercial apiarists in this way would be the most profitable time possible, and would save them treble the equivalent time and hundreds of pounds loss,

word from seven commercial men in South-less 'McEvoy-Reakes, who, we understand it to Dr Reakes, who, we understand was rather favourable to the idea. But it must be understood that this is a matter for col lective action, and it must be carried out right up and down the country; and every one who is interested in the industry taust be prepared to do his bit for his own and the common good. Just think what it would feel like to know that when you closed your bees down for the winter there was not (as far as it was reasonably possible to prevent) a diseased hive oxisting in the district. And if you sit down and think it over, it is quite a possible thing, but it means work for all beekeepers, and we believe it is just in proportion to the smount of work you personally are willing to put into it that the results will be.

In any case we hope we have said sum. cient to cause the beekeepers to see that the remedy for less disease is more or less a question of getting together and seeing the matter through,

We shall appreciate any suggestions from our readers bearing upon this point. which is urgent, important, and of vital in erest to the industry. .

We are sure our readers will be interested to learn that Mr. H. W. Gilling has been appointed apiary inspector and in-structor for the Wellington Province, and it is a matter for congratulations all round-to Mr. Gilling on the appointment; to the Department for the acquisition of a very capable man; and the industry generally for the services of an experienced apiarist, who successfully worked about 400 colonies until the work of the Honey Producers' Association compelled him to not everyone that keeps bees that give up. Mr. Gilling has been one of the registers; these lists to be handed to the mainstays of the industry during the worst Branch secretary, who would record them, period of its existence: few know better than the Editor the amount of work he has done for us, and we are sure in his new surroundings he will do as he has always done-his very best to the general advantage of the industry, Herb., old friend accept our heartiest congratulations,

At the time of writing (December 16th) the prospects for the season are just any how. In the Editor's district the pastures never looked so well, an abundance of north, south, east and west, which would clover showing, and the bush flora yielding well. But the continued unsettled weather is getting serious; fine, warm weather is quite the exception, and the last inspection of the hives indicated at least that a backward tendency was prevailing. Honcy that had been sealed round the brood had been heavily consumed; hives that had been manipulated on the Demarce plan showed the brood above rather the worse for the move, some of it being slightly chilled. Four days last week it rained; one night nearly a frost; and it has been raining now for forty-eight hours, with We are quite sure that the Department period. Judging from reports, similar conwould be willing to co-perate with the dittions prevail all over the country—in the keepers in this matter; in fact, Mr. fact, in Southland they were feeding durcrop, and "So mote it be!

A subscription has been received bearing the Christchurch post-mark and postal notes issued there; no name filled in slip. Is it yours? See if your name appears in the list of subs. received.

Market Reports.

Honey Report.-Since our last report the market has been quieter, doubtless owing to the easy position of sugar, which we think by the end of the year will have had a decided slump, as the German and Austrian beet crop will doubtless exercise an influence upon the price of this com-modity. There is any quantity of Chilian and Cuban honey offering for forward shipment at a price of 65/- to 70/-, so that apparently there has been a good honey crop in South America and the West Indies. For spot supplies however, the price is higher, and Chilian Pile 1 on the spot is worth 80/- to 85/- per cwt.

Beeswax .- This has had a decided drop since our last report, Chilian having been sold at £9 10s, per ewt. For other descriptions there has been no demand, and no sales have been made. The upshot of the whole situation is this, that we are in for lower prices of everything, and we do not recommend any holding up of supplies because, bad as the market may be now for both honey and beeswax, in our opinion it has got to be worse before it is better. The world has been living the last six or seven years in a war atmosphere, and it has now got to come back to Mother Earth; and we think that the basic values of all articles may be safely reckoned at double the pre-war values before we can breathe again and talk of markets being high or low.

Liverpool, 1st October, 1920,

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

Auckland,-The prospects for a good season seem exceptionally bright so far, The white clover is blooming freely, and the occasional showers we are getting will prolong the period of flowering. Owing to the stormy weather experienced in the spring, the ti-tree has not yielded as much as usual.-G. V. Westbrooke

Wellington.-The erratic climatic conditions experienced have been responsible for delaying brood-rearing very considerably, and as a consequence colonies are, generally speaking, not in the best of condition

ing the first week in December. But we to meet the coming honey flow. Plant feel if the weather will only pen in p. the growth, however, is phenomenal for this prospects are very bright, or a bumper power homeoficial effect with the property of the prope very beneficial effect on the surplus honey crop.-F. A. Jacobsen.

Christchurch and Dunedin.-There is every indication of the present season being above the average. Excellent rains have fallen, and the clover pastures are in good heart. Altogether the spring has not been favourable to nectar secretion, and where sufficient stores were not left for wintering, extensive feeding has had to be carried out to keep the stocks breeding. Nectar is now being stored, and as indicated above it is anticipated that a good surplus will be secured. Bulk lines: none offering. Sections are scarce. Beeswax is in strong demand. Prices are firm. In bush districts a surplus is assured .- E.

Beekeeping for Beginners.

in the Auckland Districts, an allowance must be made for difference in latitude North and South. Average bec-seasons in the extreme North are four weeks earlier, and in Southland three weeks later.-Ed.]

I feel it is useless writing the instructions for January work with the bees when the weather is more like August than January. It seems to me the chief thing to be careful about is the amount of stores in the hive, as a large force of bees consume a tremendous quantity. It is computed that a good strong colony wants about 400 lbs, of honey for its own use during the season, so you can easily see that one needs to be on the alert in this matter.

Perhaps some of you are buying nucleus colonies, and as one of our queen breeders who does a large trade in these finds there is sometimes a lack of knowledge as to the best way to deal with them on arrival. he has asked me to publish the following instructions, which it is thought would perhaps make all the difference between the small colony going to pieces or building up into a good colony.

THE RECEIVING OF NUCLEI.

- 1. Place nucleus box on bottom-board in position it will remain in when trans-
- 2. Open entrance only, and cover over top to keep warm until bees have flown well and located their position,
- 3. Transfer on warm day only, when bees are flying freely, otherwise much brood will be chilled
- 4. Place frames with bees in centre of new hive, filling out with foundation if honey is coming in. If not, one frame foundation on either side is sufficient at a time.

5. Cut hole in mat over cluster, and invert bottle feeder containing half and half sugar and water. Any preserving bettle or jam-jar will do if a piece of calico or muslin is tied over the top-The feed will not run out, but the bees will take it gradually through the cloth,

6. Put empty super on to hold packing, and pack well top and sides of frames.

7. Entrance of new hive must be contracted to allow nots more than two or three bees at a time.

8. Nuclei should be ordered to arrive after the honey flow, unless sugar has been provided for feeding.

The Marketing Problem.

By FRED C. BAINES.

(TO THE EDITOR.)

Sir -The Journal came to hand yester day, and I was much interested in the item contributed by H. Bartlett-Miller. not quite see where the shareholders were doing better before the H.P.A. started business. Personally, I am not a shareholder, but have been putting a small quantity of honey on the market for some years, and could always obtain what was ruling for top price. Does our friend seriously infer that the H.P.A. is paying £1,000 to the B. and D. to put the shareholders' goods on the market? This should not be, as I think the H.P.A. ought to be capable of handling its own stuff. I have been seriously thinking of becoming a shareholder, but cannot see the force of other concerns collaring what should be kept in the Association.—I am, &c.,

A. DICKIE.

Rotherham, 5/12/20.

The publication of any letter in the Journal does not imply our agreement with the remarks, neither do we take the responsibility for the correctness or otherwise of statements made by our correspondents. Even supposing we do pay the B, and D, £1,000 a year in commission-which we very much doubt-we have an excellent return for our money. It is all very well to talk about having our own manager in England, but until our Association is very much stronger financially it is impossible. We have made the statement before-and do so again-that had it not been for the B. and D. contract existing during the war, our industry to day would be at the very lowest ebb. You, friend D., who market. your own crop at top ruling prices, what would have been the price had the H.P.A.

have got 3d. per 1b. for your fine honey! But the most important point of the matter has been overlooked-viz., finance. Sup. posing you appoint your own manager in England at £500 a year—a good man is worth more—there is the equivalent to the commission paid on £10,000 worth of honey. The office and travelling expenses would easily absorb another £1,000, which would absorb the commission on another £20,000 worth of honey. Put your honey as selling at 10%d, per lb. in England, which is practically £100 per ton, and you have to ship 300 tons to be in no better position than you are to-day! On this showing we have not got much "forrader" by having our own manager, have we? Let us go a little further. Under existing conditions, when our honey has been graded and is in the hands of a third party ready for shipment, we can go to the B. and D. with the warrants and draw the agreed price on the different grades, and the result of this arrangement is that all shareholders are paid their advance months, and perhaps years (as during the war), before their honey is sold. Cut out this arrangement, and where are you? To whom are you going for money to pay your suppliers? Your manager in England cannot do it, and your Association here has not the cash, We are not out buying obsolete battleships or Arctic furs just now; we are looking into a business proposition of financing about 600 shareholder' crops, meaning, roughly, £30,000 or £40,000 on a paid up capital of about £5,000; and to use Mr. Miller's own words: "You may hum-and-ha about it as long as you like, but you simply must do it in the end." You, friend D., say you have been putting a small quantity on the market for a number of years. Supposing you sold to a retailer: he puts his price on that will pay him for his labour and capital, and you do not seem to recognise that he is collaring what you should have got yourself which is your argument on what the Association should do, It pays you to sell to the retailer or merchant, as the case may be, but in doing so you lose the difference in price sold at by you to that which the honey ultimately realises. In exactly the same way, it has paid us well to employ the B, and D, as our agents in England, and there are other advantages we get in the shape of any profits made on the handling of our produce coming back to us. Your buyer does not do that to you,

I hold no brief for the B. and D. Association; they are not in the honey trade for motives of philanthropy; they are out for business, and as far as I can judgeand I have no more information than any other supplier-they have done their best for us and themselves since the first contract was signed. This fact seems to be lost sight of-that before the first shipment of honey to the B. and D. arrived in England, war was declared, and the business unloaded all their crops on the local mar niged state ever since, and to-day the outket! We venture to assert you would not look is absolutely ominous; what with falling prices, unemployment, and the general aftermath of a five years' war. I do not know if another contract with our agents is contemplated; but whether it is or not, I ask myself the following questions, and put my, own personal opinion in the replics:—

- Have the previous contracts been of benefit to the N.Z. beekeeper?— Answer: Decidedly Yes.
- Has the B. and D. fulfilled their terms of the contract in paying out the agreed advanced Answer: In every in a number of cases to the extent of up to 5d, per lb, more than the price agreed in the contract—viz., 9d, agning 4d.
- 3. Has the B. and D. fulfilled the agreement in placing our honey direct in the retailers' shops under our own brand?—Answer: Without doubt; the only time this was not downed to the H.P.A. who were directors of the H.P.A. who were compelled by the sharcholders to adopt a catchepenny trade against the regular building up of a retail trade that we have Bengland.
- 4. Has any other firm in any part of the world offered to do as much as or more than the B. and DT—Answer: As faras I know, other firms have comalong when there was a possibility of turning honey over to their own advantage, but have not offered the same proposition as the B. and D.

And last but not least-

5. Has the B. and D. any experience in buying Arctic furs and obsolve battleships?—Answer: No; but are anticipating buying second-hand "tanks" and surplus aeroplanes, the former to be used as bulk stores, and the latter to provide rapid means of transit between England and New Zealand! Eh! What?

Do Young Hatched Queens Need Royal Jelly?

In the American Bee Journal for September, 1920, Mr. Arthur C. Miller writes thus:—

When examining some cells in nursery cages, from which queens had emerged, large quantities of semi-transparent felly were observed. The cells (on wooden bases) were replaced, and later, when the queens were put into nuclei all the jelly was found to be consumed. The cages had an ample supply of honey and sugar candy, why do the young queens eat the North Control of the control

Later, tests were made by putting in fresh cells from which larva had been removed, and the queens consumed that jolly. So it seemed as if they craved something which candy did not supply. If that were true, how about the health of the young queens who had only a very from which they caurged? in the cells from which they caurged?

As it was not always possible or convenient to supply cells of fresh jelly for the young queens, the matter was ignored for a time, until one day several nico young queens eaged in a strong stock for longer than usual were noticed to be feeble or dead.

Then the experiment was tried of mixing the food for the cages with pollen fresh honey and powdered sugar, making the food moister than usual. Queeus on such food did nicely, even though long confined

Will some queen breeders please observe and report facts as they find them, and perhaps some of our experimental stations can make special studies of the subject.

Bear in mind, the foregoing refers to food in nursery cages, not to mailing cages. In the November issue of the same journal, under the Editor's remarks, is the fol-

lowing:—
"'Food for Young Queens.' Mr. V. H. Benton, in the New Zealand Beckeepers' Journal for August, describes the Benton aursery incubator. Concerning the question whether young queens develop property of the property

On page 382 of this number Mr. Jay Smith has something to say on this matter.

This is as follows:-" 'Virgins need Royal Jelly.' In the September number of the American Bee Journal (page 307), Arthur C. Miller asks for the experience of others concerning whether or not royal jelly is necessary for virgin queens. Your experience, Mr. Miller, corresponds with mine. For a number of years I used nursery cages for the virgina to hatch in, caging the cell about 24 hours before time for it to emerge. noticed that the newly hatched virgius 'sorter had a hankerin' ' for royal jelly, and would clean it all out of the cells. Sometimes they would gnaw down into the base of the cell clear to the wooden base, probably hoping to strike another jelly vein. Many would be found dead in the holes they made. I know my style of candy did not suit so I placed a little honey in the cages, but this did not seem to satisfy the craving after jelly. I then began to reason that if the virgin required jelly, probably in her natural environment

the nurse bees fed it to her, and if that was the case, nice fresh warm jelly is as much better than hard cold dried up jelly, as a nice ripe delicious apple is better than dried apples. (Ever eat 'em'? They are awful!) This led me to make some are awful!) This led me to make some experiments. Out of the same batch of cells I caged part, and gave the others to nuclei without cell protectors. Those in the nuclei hatched first in most cases. Those Intching in cells were introduced to nuclei. Out of 17 of each, 16 of the queens from the cells that were given to nuclei were laying before the first one from the 17 batched in cages was laying. Subsequent experiments gave about the same results. I frequently noticed that if a virgin was caged three days, she mated three days later than if she had hatched among the bees. This proved to me that the virgin needs the attention of the nurse bees if the very best queen is to be reared; therefore, I 'junked' all my nursery cages and gave a naked cell to the colony or nucleus. For the same reason I abandoned the cell protector. In the first place it does not do any good. It is well known that a colony will accept a cell more readily than a virgin. So if they would not accept a cell, and you put a protector round it, why, they just appoint a vigi-lance committee to keep an eye on that cell, and as soon as Miss Virgin pokes ber head out, they nab her and kill her. That is all they do to her except drag her out. But if you do not give them so ripe a cell—one that will hatch in about three days-it will work all right. Yes, but if you leave them queenless two days and, give them a cell that will batch in one day, they will accept it too, so you have not saved anything by using the protector, but you have gained a whole lot by not using it. The bees have access to the cell, and thin down the wax and cluster about it thereby giving it the proper incubation; and when the virgin comes out, there stand a row of nurses with mouths chock full of jelly ready to feed her. For the best results we should keep as close to bee nature as possible.

(The Editor American Bee Journal applands with both hands at these conclusions, for he had also tried the queen nursery years ago, and did not like it always succeeded best when we kept close to nature.)

For a challenge to be issued in our Journal and to be taken up by prominent beckeepers in America in Very interesting Messra. C. P. Dadanja Arthur C. Miller, and Jay Smith are certain amongst the most Jay Smith are certain amongst the most prominent beckeepers in America, the latter gentleman being off the largest queen breeders; therefore their opinions are worth every considerated on the matter, but my nursery eages are experimented on the matter, but my nursery eages and with serend wire on the one side and queen excluder zinc on the other, which all wows the boes to get to the cells and hatet lows the form the control of the

learning the industry with one of the meat experienced and successful beckeepers in the Dominion. I noted the construction of the unreser cages, and on asking the reason was told it was necessary that the bees got to the hatching quarter that the bees got to the hatching of the construction of activities of our own breeders on this point, as it is only by comparing notes by experienced men we get the best course to follow.

The above article is, of course, not intended to belittle Mr. Benton's ingentions appliance or to minimise in any way his genuine intention of giving the industry an appliance that in his hand, was eviperated in the control of the course of the remarks is to show that, seeing there is, a very great difference of opinion on his matter, which deals with the general stamina of the queens, consequently the most vital point in successful beckeeping, it is a queetion that and the cosmonably belosse give us your conclusion.

F. C. B.

District Reports.

HAWKE'S BAY.

The following is an address given to the Hawke's Bay Beekeepers' Association by Chaplain Captain Hardie. The subject is by no means local, but of widespread importance. We would suggest that he who reads these words should read also an advertisement inserted by the Chaplain in the Journal.

Chaplain Hardie spoke concerning his work in the military hospitals as it applies to beekeeping. Patients in these institutions are suffering from various complaints. Their life is often such as to tend to make them become apathetic, and the problem becomes how to awaken the interest of the soldier in himself and in others. To do this, the Vocational Department operates; and among the several vocational classes is one of bee culture. In all these vocational classes there are both immediate and remote advantages to the patient. If the supervisor can so employ a soldier for an hour a day during his convalescence as to take his mind away from his trouble, the man is receiving a great benefit both physically and mentally. But further, many of the patients, for one reason or another, will be unable to go back to their former life, and these vocational classes give them something to go to when they leave the hospital.

are worth every consideration. Personally, I have never consideration. Personally, I have never primered on the matter, but my nursery eages are made with sereen wire on the one side and queen excluder raise on the other, which allows the bees to get to the cells and latching virgins, When

the class getting into touch with a neglecthe daplary. Here foul-brood ran riot, and ter past 5. He was still cheerfully impart the students undertook to undo its ravages, ing knowledge upon the question of the It is a benefit and instructive to these men day. to see what an apiary will become when neglected. This class will go forth already acquainted with the disease, and with full knowledge of the way to treat it. It is amazing to see the keenness of the men in redeeming these hives,

Every effort is made in the instructional work to let the men get experience. They are also encouraged to use initiative. Expense must be kept down, and so the class makes its own hives, using petrol cases. In some instances they make their own Comb is collected, and various methods are used in rendering. Any idea that comes to a man is tried, and an effort is made to develop in the men what they have, and what they see, and what they think. The interest is wonderful.

What does it lead to? An hour or two away from their disease. But there is more, for some are taking up the work as a livelihood. Several men are already settled at beckeeping. All through they have been diligent students. Efforts are made to get the students into touch with an experienced apiarist. It would be of definite interest to the Pukeora class to be in touch with the Hawke's Bay Beekeepers' Association.

The date for a Field Day, to which we wish to welcome a delegate from the National Executive, is fixed for 9th Febmary. This Branch is boping to have arrangements made to hold it at the Pukeora Sanatorium, Waipukurau, among the bees and the soldiers mentioned above. J. P. BOYLE.

December 15th, 1920,

PICTON.

Talk about the weather! Well, judging by letters appearing in the Journal, should think we are getting our share of what is being doled out to the Dominion as a whole. We are also getting our share of "tuition" in patience, for like the bees elsewhere, ours will not stay where they are put!—at least, they have been trying to "go on their own" for the past six weeks. However, things are beginning to look brighter, and nectar is coming pretty freely. Most hives now have their second supers on, and a few with a third. Prospects for a good season seem very hopeful.

On Tuesday last we had the pleasure of a visit and a demonstration by Mr. Earp, and a half. The day was not very bright, but the bees were very quiet (I think Mr. Earp must have some magic influence over them; they evidently know a friend), notwithstanding a southerly wind, About ten beekeepers gathered to meet him, together with a squad of boys from the local school. Mr. Earp was kept busy answering questions throughout the demonstration, and I even came across him bailed up on the

street by a couple of enthusiasts at a quar-

Fortunately (and unfortunately) those present at the demonstration were enabled to see the ravages of foul-brood; hence they received some very wholesome advice as to its treatment,

Before dispersing, a very hearty vote of thanks was accorded Mr. Earp for his very interesting demonstration, and every-one went away feeling that he had received a good afternoon's instruction, well convinced that it pays to heed the advice of the instructors and keep his bees clean and healthy.

Mr. Earp left again by the evening train for Blenheim, where he was to give another demonstration the following day.

Hive Tool.-Those who want a handy hive tool which will cost them nothing, I would advise to obtain from any wool store a broken piece of dumping band the required length, one end of which they can bend up, say, half an inch, and file the edge to the required sharpness; the other end is left plain, and also filed sharp, and there you have a handy tool which will serve you faithfully. As these dumping bands are mild steel, they can be easily tempered if you happen to get hold of a

GEO. M. BLIZZARD.

CLUTHA VALLEY.

Important Notice .- The Annual Field Day of the above Branch will be held on Saturday, January 29th, at Mr. R. Me-Arthur's Apiary, Awamangu, at 11 a.m. We heartily invite all beekeepers and friends to be present. A good programme has been arranged,

H. N. GOODMAN.

TARANAKI.

Things have taken a turn for the better lately. Since 23rd November we have had a good sprinkling of fine days, with a fair clover flow, and bees that are any strength have got a fair start in the supers,

Say, Mr. "Canterbury Tales," I did not advocate giving brood as a general plan for preventing swarming. I guess you sided with me by mistake as you said, "My experience is that it is the medium colonies that are most prone to swarm." Now, next time you get a medium colony with cells and strong enough to take a super, you just put a super on and borrow who kept us interested for about an hour about three frames of brood from a strong one, and put in the super with a couple of combs between. Guess that will get

Send for Pamphlet on "BEESWAX."

6d. POST FREE,

W. B. BRAY, Barry's Bav. they will not be so likely to swarm. You got me wrong if you understood I was in got me wrong if you understood I was in favour of eaging queens; I like to keep mine right on the job, and if they cannot fill at least sixteen frames with brood, then they are no use to me. H. R. PENNY.

Okaiawa, 15/12/30.

AUCKLAND PROVINCIAL BRANCH

Our district has been getting its full share of rain lately. The pastures are in good shape for a good honey crop, quite a quantity of honey being in the hives at this date (Dec. 18th). A for week and this date (Dec. 16th). A few weeks good weather, and I think we will all turn up smiling on 16th February.

Our district has been having a good raking over by Mr. Goodin, our inspector. Some stocks are no more, having gone up in smoke. Oh, if we could only keep him here, with a reasonable amount of territory to cover! We must congratulate the Department on having provided him with a The position is a bit more "Lizzie." hopeful.

We are sorry to hear that some of our respectable friends are shortly to appear in some prosecution cases. I would advise those that have not registered their apiaries not to delay.

A. H. DAVIES. The Auckland Provincial Branch of the National Beekeepers' Association of New Zealand cordially invite all interested to attend their Annual Field Day, to be held (in conjunction with the Department of Agriculture) at the State Apiary, Ruakura Farm of Instruction, on WEDNESDAY, 16th February, 1921 at 10.15 a.m. A. H. DAVIES,

Secretary. G V. WESTBROOKE, Apiary Instructor. Programme.

10.15,-Welcome to visitors by the Farm Manager (Mr. W. A. Green) and visiting officers of Department of Agriculture.

10.30,-President's Address,-Mr. E. W. Sage.

10.40.-Outline of work in progress at Apiary .- Mr. A. B. Trythall.

11.-Finding, clipping, caging, and introducing queen to nucleus colony formed for purpose .- Mr. Rhodes.

11,20 .- Swarm control, with and without queen excluders .- Mr. Goodin 11.50 .- Lunch. Written questions to be

handed in. 12.30,-Address,-Mr. Rylands, Manager

1.-Queen rearing, with questions and answers on same,-Mr. A. B. Trythall and cadets.

1.20.-Grading Honey-Mr. & V West-. brooke.

Then past the medium stage, and then 1,40. Questions maswered,—Mr. I. Hop.

2.10.—Taking surplus honey .-- Pearson

2.30,-Photos.

2.45,-Addresses by local members Parlinment

3.-Melters demonstrated.

Provided suitable arrangements can be made, a melter competition will be held, with a substantial prize. Tea will be provided.

February 16th is a race day in Hamilton, with special trains from districts around Anyone intending to stay the night will require to book accommodation well ahead. I shall be glad to assist anyone requiring accommodation.

A. H. DAVIES, Secretary.

SOUTHLAND.

The annual Branch Field Day will be held at the apiary of Mr. F. Hemmingsen, Seaward Bush, on WEDNESDAY, 2nd February. In announcing this, we wish to indicate our intention to give everybody a pleasant and instructive time. A com-prehensive programme has been prepared that will interest both the expert and the amateur. We issue a cordial invitation to all to be with us.

L. IRWIN, Secretary.

WEST COAST. We have received word by wire that the annual Field Day will be held on February 12th. Further information as to where this will be held can be obtained from the secretary, Mr. D. T. Cochrane, Clematis Apiary, Cobden.

TAIERI.

Yes but we cannot talk! Are you acquainted with the "bacillus boddi?" Did you ever get the bod? Even so! We have it. That rocky-road feeling inside of us stifles loquacity. We would love to talk, you know, but-

First of all, weather; but let it alone; it's best not to throw soap into a geyser. In consequence, no Field Day (so far). How we had intended to plume ourselves on our double event! And you wonder why there are thoughts that breathe and words that burn!

However, there will be a Field Day at Mr. Clark's Apiary, Main South Road, Mosgiel Junction, some Saturday about the middle of February, 1921. Please note! Definite announcement in the papers.

We mentioned that Donal' had left us. We hear now that some people in a certain district (I said "people," not "beekeepers'') remark with sighs of relief: "Ah! now we shall be able to keep a hive

or two in a box under the hedge, I tell you!" The law or the system of inspection that will put down this type of thing must bear the brand "Made in Utopia." The average mortal thinks that the crime is only in being detected. That fact disnoses of the law. The Government does not present the inspector with seven-league boots, nor does Nature endow him with the boots, nor does Nature endow min with the eyes of Lynceus. That disposes of the in-spector. If box hives are to be extermi-nated by law, we must have an inspector for every county in the Dominion, "Reduc. ad absurdium." Therefore, it behoves brigade! every man to look to his own interests in this matter. Does the Taieri realise that? I fear not.

By the way, there is to be a smaller Field Day here in the early part of the year. Buy a paper. BASIL H. HOWARD.

16/12/20

Canterbury Tales.

By E G. WARD.

After reading last month's Journal, I came to the conclusion that Canterbury has not got a monopoly of erratic weather I anticipated frost after the storm I reported in the middle of last month, but fortunately we missed that experience. The effect of the cold snap was serious enough without frost on top of it. "From information received," it appears that a great deal of brood was chilled, and stores greatly depleted. During the last four weeks the weather has improved, and we have had one nice shower; but on the whole it is too dry. We have had several heavy nor'-westers, which do 2 great amount of damage.

Brother Bartlett-Miller, you have taken me to task because I said it was the duty of all beekeepers to support the H.P.A. Now, I am going a bit further, and will say that it is good business also. Everything you say in reference to competition by other business firms is probably well known to the directors, and I have such confidence in those who are in charge that, to modify your own words, "I certainly feel sure (not think) that we shall in time obtain as good results from the H.P.A. as we could outside of it." You talk of business ability and the reputation of the goods produced by yourself and others who, you affirm, could get a better price without the H.P.A. Just hold on a bit! Let some other person come along and offer his goods at a lower price and then see what happens. Reading between the lines of your article, I am of opinion you are an individualist, and not very logical either.

I have read carefully all that appeared

not tried warming the honey as suggested by Mr. Rentoul, but faithfully observed all other conditions as pointed out by Mr. Bryans. I tried several sizes of pulleys, and even tried the big pulley on the ex tractor and small ones on the pump, even tried running it the reverse way. without any better (or worse) result. Until someone can demonstrate to me the why and wherefore of my failure, I shall continue to be a member of the bucket

I am going to take exception to that statement on page 212, that it is a waste of time to cut out queen cells to prevent swarming, but at the same time I want to qualify my remarks. Cutting out queen cells will not prevent swarming if the bees want room; but I have many times headed off swarming by cutting out cells and using additional methods which experience has taught me are effective. A short time ago I had a very strong colony which had got a bad attack of the swarming fever, so I took drastic measures. I cut out all cells, gave an extra super (of out all cens, gave an extra super (or combs), put one frame of brood in the brood chamber, and shook all the bees off the brood into the brood chamber, and put the brood on top of all. I thought, here's a chance to get some good queens reared, so I adopted the Appler method and gave a bar of cells. Result, all cleaned out. Tried again; ditto. Tried again; ditto ditto. That was enough for me. I took off the escape which I had put under the brood, and you should just see how that colony is working,

That letter by "Down South" contains much food for reflection, if such a term is admissible where foul-brood is concerned, I believe every commercial beekeeper is on his side with regard to a good stiff license fee; but there seems to be a soft spot somewhere in the hearts of our legislators for all sinners. Even our magistrates do not see the seriousness of the position. It seems to me that the maximum fine allowed by law should be raised, and a higher penalty inflicted than has been the case up till the present. It seems to be hopeless trying to educate the average "sideliner" in beekeeping. He does not subscribe to a journal, and if one tries to instruct him, he has no time to listen-Whether foul-brood is increasing or not I am unable to say, but I know it is nearer to me than I care about. That it can be stamped out I am certain, and it never need be a serious menace if each one would deal with it immediately he detects it; but so long as it is tinkered with so long shall we be cursed with it.

That is rather a novel way of getting rid of drones reported by Mrs, Walton (p. 221). I am rather doubtful of its efficacy too! Too many hens would be needed in some apiaries, I fancy. A better plan is to use full sheets of foundation, and so prevent last month regarding the honey pump, and am now no nearer a solution of the reason apiary (sideliner again) where half-sheets of my failure to make it "geo." I have bad been used in full-depth frames. Result, the remaining space was filled with natural built drone comb, and the owner wondered why his crop of honey was small.

May I suggest to Mr. F. Saunders and anyone else who use wedges for fixing foundation that they use wax for fixing instead. It is much quicker and sufer, and does not cost much (if any) more.

By the time these "tales" appear, Xmas will have come and gone, but I trust all the readers will have enjoyed a good time, and be wondering how to dispose of their big cheque for the bumper crop which as yet has not made its appearance,

Correspondence.

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

(TO THE EDITOR.) Sir,-We noticed some time ago that you

were willing to answer questions on beekeeping, so purpose troubling you. It is about de-queening and then re-queening with a capped cell without a wire protec-We ought to be able to come to a conclusion as to the right way to do this, having read "Gleanings," pages 275, 276, 278, 279, 474, 540, and 541; American Bee Journal, page 382, column 3; and last, but by no means least, N.Z. Beekeepers' Journal, pages 191 and 215; but in "Gleanings" the experts differ, and Mrs. Alleu (an expert) failed. Apparently the reason she failed was because queen cell was not "protected" by adhering bees on frame moved. Mr. Ward (N.Z.) says nothing about adhering bees. Another point, if adhering bees are required that means that the whole frame, not queen cell only, has to be given to the colony to be re-Hassinger and queened. Pritchard ("Gleanings") seem to differ, and when the experts differ, common-place tolk like myself do not know what to do. These folk are of course far away; but when our own E. G. Ward says (page 215), "Why protect a queen cell?" and your own good self says (page 191), "Use a protector,"
we are puzzled. Let us put it in another way that is quite personal; we may pick up a stray swarm of blacks and wish to re-queen with an Italian queen cell. Will following do? Persuade the Italians to following not retrained the training to some up not. Due to the destriction of broad into super, taking of an introduced cell now and then. care that there are eggs in the frame; put under the super a zinc excluder, making sure that queen is below. When queen as long as we dare without danger of emerging, then put a cell into the colony of blacks, without any brood or metal "protector," immediately after finding (a "protector, hume-makes) acres moning (a troublesome job this "finding!") and kill. Since the above answer was written ing the black queen. If feasible, this way we have come across Mr. Jay Smith's and undastors (which appears)

ing of eggs. We are aware, by reading, that if a colony is left queenless for about two days or more, they will commence making their own queen, and possibly destroy an introduced queen cell, so think we have that point clear. On the other hand, possibly introducing a queen cell immediately after de-queening may be too soon; this depends, we suppose, on how long it takes the bees to realise that they have lost their mother. We have noticed that sometimes experts in giving instructions omit some small but important detail that they take for granted the learner knows: but unfortunately he or she does not know, and the result is failure. Now let me re-capitulate a little. First thing is to have a queen cell as nearly as possible emerging; then de-queen colony to be re-queened. Now the questions: Shall we give queen cell immediately or when? In a wire 'protector'' or not? Or shall we give whole frame with queen cell alone or with adhering bees? Don't the adhering bees quarrel with the others? Perhaps being in such a small way as I am, I should not trouble you with questions, but do not think you will mind, and hope that this will be in time for you to give me a reply in January number if convenient. Thanking you in anticipation .- I am, &c. DAVID CAMPBELL.

Victoria av., Waiuku, 9/12/20,

Friend C.,' we believe it was Doolittle who made the statement that to work bees to the best advantage it was advisable to follow nature as far as possible. It will be admitted that for a hive to have a laying queen one minute and without any indication of swarming to suddenly lose its queen and find a ripe cell is not natural; and we think it is at least a risky proceed-

We prefer the hive de-queened, and sufficient time allowed for the bees to realise their loss-say, 24 hours. During that time the bees will have started to make good their loss by starting fresh cells, and the sudden receipt of one almost ripe is probably welcomed by them. There is no need to bother about adhering bees; there will soon be enough of them on the introduced cell from the hive this is placed in.

The question of protecting the cell is more or less a matter of opinion, and like many other appliances, some favour and some do not. But that they are useful sometimes is evidenced by the destruction

Your method of re-queening the black swarm would be all right, but we should cells (if any) are built, leave them there prefer to kill the black queen twenty-four hours earlier than you, and personally we should protect the cell. We should NOT give the frame of brood and adhering

would make only a short break in the lay- opinion on cell protectors (which appears

elsewhere in this issue), and it is different melted wax when making comb foundation. to ours. However, we are convinced that Mr Smith has raised hundreds of queens to our one, and for that reason is probably in a better position to judge the usefulness or uselessness of the protector. We are bound to admit that it is not natural for a queen cell to have a wire fence round it. We are willing to take second place to Jay Smith when it comes to queen rearing. Ed no was a little of

(TO THE EDITOR.)

Sir .- I have been carefully perusing your Journal ever since the report of the last Conference appeared, and fervently hoping that someone able and willing would have something to say (from the small beekeeper's side) re the proposed annual fee of £1 that was and is being advocated by the commercial beekeepers; but it seems no one has tackled the job. I have beard a lot of comments (mostly unprintable) from four or five friends (small beekeepers, like myself) about this proposed £1 fee. I suppose we are a lot of fools because we can't see why we who own 25 hives between us should pay £6 for six small apiaries, while the commercial beekeeper, who owns perhaps 200 hives, should pay £1. Does beekeeping on a commercial scale necessitate having some of the bees in the headgear of the commercial beekeeper, because, what with apiary boundaries and annual fees, irrespective of size of apiary or benefits received from it, makes me think it must be a very difficult matter for gentlemen who meet at beekeepers' conferences to see any other side of the question but their own. Of course, I am aware of the argument about more inspectorsand they are needed; but why not enforce the present Act? Ask any inspector what support he gets from the Department if he wishes to prosecute an habitual offender, and hear what he says; but do not ask him

You have a law on the Statute Book which, if impartially enforced, even with the present force of inspectors, would soon relegate box-hives and other foul-brood nests to the limbo of the past. Do you not think an annual fee of £1 will kill men like myself as far as beekeeping is concerned, and is it fair that, irrespective of the size of apiary, all fees should be the same? Why not a small export tax per pound, or ton- of honey, or a fee of, say, one shilling for 10 hives or portion of ten hives, and put the burden on those who make money by bees, and not on those who pay money to keep bees, and be fair to the large commercial beckeeper and his humbler relation,

THE SMALL BEEKEEPER. Birkenhead, Nov. 9th, 1920.

(TO THE EDITOR.)

carbolic acid for destroying foul-brood in would not bestrate to put such an one beeswax. Many years ago, when foul-brood out of the bee business. Wilful disregard was rampant in Poverty Bay, I was recommended to try a small quantity in the license.

Some days after the combs were given to several swarms, with the result that every one of them cleared out at 10 o'clock next morning, and a large pile of sheets had to be laid aside, tabooed !- I am. &c. GEORGE STEVENSON.

Waighika, Gisborne, 15/10/20,

Answers to Correspondents.

J. G. R., Tirau, A. H. K., New Plymouth, A. S., Tahakopa.—Thanks for stamps. D. C., Waiuku, J. W. R., Wellington,-Many thanks for new subscribers. Journals

Novice.-We do not know if metal combs are procurable in this country, and even if they are, we should hesitate about recommending them to any but an experienced man. As far as we can learn up to the present, these combs are not a success everywhere: some hives seem alone; and the use of these bave not vet passed the experimental stage, Stick to the wax foundation for the present,

Notes on Previous Issues.

By "GERON."

The Recent Regulations.

and you will not go wrong.

So at last perseverance has won its due reward, and we have a modicum of what we require. The 5/- minimum is a good thing. Nobody to whom even one hive of bees is worth less than that sum will ever become other than an unmitigated nuisance to our craft, and if in bad seasons such an one does not get his 5/- worth out of the mere pleasure of owning the bees, then exactly that person is the one whom beekeepers worthy of the name have the greatest reason to dread. No person nowadays can be permitted to own anything if mere right of ownership is to be the claim to persist in such ownership to the highly probable loss of others in the immediate vicinity. In our vocation, such "'probable" loss might in 99 per cent. of cases be written "certain loss." If, therefore, the erv is raised that the minimum fee presses too severely upon the one-hive man, let such work out his own financial salvation, and increase to three hives; they will take little longer time to look after than does one only. Then, if 1/8 per hive is too heavy an insurance against neglectful neighbours, when (as our Editor has already remarked) he would pay much Sir,-Mr. Ward asks if anyone has used more to cure one attack of disease, 'Geron'

There are still many matters we badly need regulations to control, so let the gazetting of those we have encourage those esponsible for continual agitation of the powers that be to press on the good work. "In due season ye shall reap if ye faint not."

Registration of Apiaries

Judging from the mere printed report of the non-registration of all his apiaries by Mr. Holditch, "Geron" is asking himself whether or not it is necessary to send in a separate card for every yard one owns? One can scarcely imagine any commercial honey producer lying to an inspector as to either the locality or number of his outyards when once he had registered as a beekeeper at all. If such prosecution was merely a grabbing by the inspector of a mere technical breach of the registration regulations-and I think that on the face of the report it bears this interpretation then prosecution has been reduced to persecution. Any man might think that to register some of his yards and thereby filling up his card would have been sufficient, as the others could easily be visited when the inspector came along. Of course, this statement would have to give the actual total number of yards and colonies.

Furthermore, if I establish a new yard, must I register it as soon as I commence operating it? That is, of course, a yard additional to those I have already registered, I am not referring to the case of a beginner. Publication in a permanent place in the Journal of the main items of compulsory registration, might not be a bad suggestion, Mr. Editor.

Malvern.

Where is Malvern? I cannot find it in any railway guide on either railway or coach route. Our esteemed contributor, Mr. J. E. Yeoman, sends along such readable matter that one is missing a good lot of appreciable information through being unable to make comparisons of locality and climate. I will warrant he will not regret the cold August and September yet.

November was (throughout almost the whole Dominion) so cool and boisterous that I am afraid that many of our August and September early-brood enthusiasts will be regretting the aftermath of those prosperous brood producing months. It always happens-without one solitary exception in all "Geron's" years of beekeepingthat any advantage gained through an advantageous spell of weather during August and September, has to be paid for in extra stores during later months to maintain the surplus bees reared during such favourable spells. We cannot very well do away with the brood reared, nor alter the season to a normal one; but it is well that novices should be cautioned that all such abnormally reared brood must be retained, and that its retention requires an outlay other than what the normal develop-

that extra brood positively must be replaced in the hives, or your lovely, strong, early colonies will peter out between apple blossom and the start of the clover flow. More colonies are lost in our Dominion during this period than are lost by any other cause whatever. Because the owner sees the bees busily carrying pollen and water, he imagines they must be gathering, and never realises his error until examination of the hive discovers absence of eggs or actual starvation.

The Late Dr. C. C. Miller.

Alas that the dear old friend of we older men is no longer among us! What we owe to the kindly nature of his temperament the younger generation will probably never realise. His book, "Fifty Years Among the Bees'' is a benediction, as well as a model of kindly intercourse, and no bee-keeper can afford not to have read it, even apart from its vocational attraction. and away above anything that Dr. Miller may have given to our fraternity in the matter of inventions or suggestions of a mere mechanical or technical nature is that lesson he so gently promulgated of broadminded discussion of any other person's disagreement with his own views. Only those who have been long subscribers to "Gleanings"-and there are many such among our readers-will be able fully to realise the value of "the works that follow him." Oh that "Some guid wud the giftie gi'e us'' to endeavour to develop a temperament like our dear departed doctor's. What a boon it would be, say, at the Conferences occasionally .- Who did you say you saw blushing? Well, a disease known is half cured, so why not try to cure the other half? We all can if we try, and "Geron" acknowledges that as much as any he needs to take a leaf out of our dear old benefactor's book of life. God bless him! It is a great solace that I, who am nearly there myself, will find so many of such kindly hearts waiting for me,

Vital Measurements.

Can anyone advise as to where one may obtain reliable information concerning the exact length in millimetres of the wings, tongues, and honey sac capacity of the various races of domestic bees? one has the average measurements, one might be running a blind trail for years, with bees deficient in dimensions, and imagine all the time that his stock were, at the start of his investigation, normal in all such qualities, because he thought them just the average run of such race,

"Geron" finds great differences (in even half a dozen different colonies) in wing length, for even the one-thousandth of an inch must make a tremendous difference in the honey crop, and he has a shrewd idea that the marvellous differences reported now and again of yields of colonies ment of the colony would have called for, important but unconsidered differences in This means that stores used to develop longue or wing development. If this is so, then the sooner we obtain some definite information upon the subject the better. We may be neglecting the vital point of our improvement of bees by breeding. If spared, "Geron" will have something more definite for next issue on this subject.

[Luckily we are able to render you a little assistance. The following particulars are contained in a letter received from Mr. M. Atkinson, the eminent queen bee specialist, of Fakenham, Norfolk, England.-Ed.]

I have a record of tongue lengths of Caucasian native bees, as supplied to me by the Russian Govt. Station at Tiflis, when I imported my first native Caucasian queens, 1913 or 1914. These figures are:

Mm Bees of the Govt. of Moscow Govt. of Riazan ... Govt. of Erivan ... 6.39 Govt, of Tiflis 6.47 Dist, of Zangezur ... 6.47 6.49 Dist, of Krainsk ... Dist. of Ordubat 6.59 6.66 Dist. of Abhasia

casian-Persian hybrids—vicious beggars, A. H. Kendall, New Plymouth, to Nov. 21. too! I have no figures of tongue lengths of F. Quayle, Ngaere, to Nov. 21. too I may no inguire or tonger lengues or their races, so the last is not of much value or the races, so the last is not of much value or to me for comparison. It shows we were the source of the last of the las ferent districts quoted, and this may or may A. Mudford, Kakahi, to Nov. 21. not be more marked in a comparison with bees of other races, such as Italians, T. C. Fogarty, Morrinsville, to Oct. 21. ever, would be as to how far tongue length A. C. Chapman, Tinwald, to Nov. 21. may possibly influence bees in their choice M. E. Buchanan, Kelso, to Nov. 21. of flora, and so bring about variation in of flora, and so bring about variation in colour of honeys produced in the same yard P. Riddell, Milburn, to Nov. 21. simultaneously by different races of bees.

meeting of a Borough Council by the reading of a letter signed "J. G. Reid," draw-H. Robinson, Blenheim, to Aug. 21. ing the Council's attention to the number G. J. Verrall, Upper Riccarton, to Sept, 21, of bees owned by a resident of an adjoining property, and which he alleged were a C. W. Houston, Lyndhurst, to Nov. 21. danger to man and beast, and a drawback J. Keast Ladbrooks, to Nov. 21. to the sale of his place. The late tenant F. Hunt, Putaruru, to Nov. 21. of an acre section, said the writer, was sup- H. Bettger, Rangiora, to Dec. 21. plied with veils by the bee owner, but F. J. Coombe, Havelock North, to Aug. 21. as none were supplied to the animals, they J. W. Rogers, Wellington, to Feb. 22. had to be kept outside. His solicitor had W. Wilkinson, Wellington, to Nov. 21. had to be kept outside. His solicitor and written to the bee owner, and the writer (0. L. Grant, Collingwood, to Nov. 21. had seen him personally, but he had de-lind to remove the honey gatherers. As A. R. Jones, Morrinsville, to Dec. 31. there were 70 colonies of bees or there. T. O'Brien, Winton, to Dec. 21. about, "the Council can have an idea of S. G. Bishop, Te Kawa, to Dec. 21. how things are with those living alongside W. Nelson, N.S.W., to Dec. 21. the busy little bees, and I trust you will A. H. Skey, Tahakopa, to Dec. 21. help me in this matter and have the power D. Reynold, Mata Mata, to Dec. 21. to order their removal,"-It was face J. A. Burns, Papakura, to Dec. 21. tiously suggested that the services of the ranger might be enlisted.—Cr. Bott pointed Mrs. S. Chaplin, Dargaville, to Dec. 21. out that if the solicitors could do nothing, G. Mair, Ross, to Nov. 21. it was evident that the Council could not, H. D. Hills, Learnington, to Dec. 21. and the letter was "received."—Clipping, J. 7ali, Ohuti, to Dec. 21.

Subscriptions Received.

INOTE .- Should there be found any discrepancy, please write the Editor.]

J. G. Russell, Tirau, to Nov. 21. J. A. Brown, Temuka, to Nov. 21.

the eminent queen bee D. W. Ross, Grey, to Nov. 21.

Miss A. B. Watson, Southland, to Nov. 21, E. Jurgin, Taumarunui, to Oct. 21.

Mrs. M. Brand, Wendon, to Oct. 21. P. C. Ginders, Taumarunul, to Oct. 21.

Mrs. A. H. Tompkins, Hamilton, to Oct. 21. B. Frampton, Hinds, to Nov. 21.

Z. T. Cousins, Waimate, to Nov. 21. F. J. Holdaway, Blenheim, to Nov. 21.

J. Reid, Lyndhurst, to Nov. 21. .. 5.81 A. J. Heyhoe, Masterton, to Sept. 21.

W. Heald, Otorohanga, to Sept. 21. Miss Partridge, Mata-Mata, to Dec. 21.

H. E. Krutz, Moutere, to Nov. 21. T. Pearson, Tai Tapu, to Nov. 21. A. McMillan, Invercargill, to Nov. 21. T. H. Clarke, Mangapiko, to Nov. 21.

A. Brown, Auckland, to Nov. 21.

A. M. Bird, Timaru, to Dec. 21. F. H. Schneider, Tinwald, to Nov. 21. Some amusement was created at a recent L. Thompson, Chaneys, to Nov. 21.

Beekeepers' Exchange.

[Advertisements on this page will be inserted at the rate of 3/- per 30 words per insertion. Cash must accompany order or will not be inserted. Addresses care Editor 6d. extra to cover cost of postage of replies.]

FOUNDATION. COMB

I CAN NOW SUPPLY COMB FOUN-DATION at 3/6 per lb, f.o.r, Christehreh; or will make up Beckeepers' own Wax at Sd. per lb.

Beeswax wanted in any quantity. A. ECROYD, 157 Cranford St., Christehurch,

COMMERCIAL APIARISTS willing to assist Returned Soldiers who have had a Course of Instruction in the industry are requested to communicate with

CHAPLAIN CAPT, HARDIE, Trentham Camp.

THE APIS CLUB Port Hill House, Benson, Oxon., England.

Two of the chief planks in the platform of the above Club are-the stimulation and conduction of research work in Bee Culture and the creation of International scholarly relations amongst progressive apiarists in all countries.

Membership fee, 10/6 per annum, which includes one year's subscription to the "Bee World," a paper that has by sheer merit come right up to the front rank of Bee literature. ENROL NOW!

Dr. A. Z. ABUSHADY,

Secretary,

NUCLEI FOR SALE.

I SPECIALIZE in NUCLEI, and am now booking orders for delivery from February onwards for good strong 3-frame Nuclei. with young Queen from my breeder.

A real honey gathering strain; original breeder the pick of 1,000 colonies.

No foul-brood. Safe arrival guaranteed. Price, 32/6 each f.o.r. Normanby,

Reduction large quantities.

Also, a limited number of One-year Select Tested Italian QUEENS, suitable for Breeders, at 10/- each.

Delivery from 20th January.

H. R. PENNY, Okaiawa.

FOR SALE, 200 Tarred 12-Frame BOTTOM BOARDS; last a lifetime.

Also, in March next, 100 Hives ITALIAN BEES: guaranteed free of foul-brood. Two SITES go with Bees; Hive Material in good order.

BOX 20, Waihou.

FOR CASH SALE (as a going concern at end of present season), ONE OF THE MOST UP-TO-DATE APIARIES IN N.Z.; guaranteed free of foul-brood; consisting of about 350 Colonies bees in one of the best honey producing districts in the North Island; everything in first-class condition; reason for selling, owner leaving New Zea-

For further particulars apply THE EDITOR.

Send for Pamphlet on "BEESWAX."

6d. POST FREE

W. B. BRAY, Barry's Bay.

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 & Tubing, posted to any part N.Z. Price 40/-Or send your Bingham Knife and I will convert it for you. Price 30/-Can and Tube 5/s extra. WORKMANSHIP GUARANTEED.

WILLIAM HAGERTY, Electrician, WINTON.

HONEY.

We intend to enter into the Honey business next season and will require large quantities of South Island Honey early in the New Year. Our arrangements will enable us to offer to beekeepers a better price for their crop than they can obtain elsewhere.

Fairbairn, Henderson Ltd.,

Importers, Exporters and General Agents,

238 CUMBERLAND STREET, DUNEDIN.

P.O. Box 502.

Telegrams: "Fairhand, Dunedin."

1920-21 AMENDED PRICE LIST

ITALIAN QUEENS.

PRICES:

		1	2	3	4	3
Untested		7/6	14/6	21/-	28/-	35/-
Select Untest	ed-1/-	extra p	er Queen	n.		
Tested .		12/-	23/-	33/-	40/-	50/-
Select Tested		17/6	34/-	45/-	60/-	75/-
Prooders		30/-				

Orders for Full Colonies booked up for the season.

Tested Queens booked up till 21st December. Untested, about 20th November.

TERMS: Nett Cash with order. Cheques to have exchange added. P.O. Order Office, Edendale.

All Bees and Queens Guaranteed FREE FROM DISEASE, and bred from good working stock,

Postal Address:

ROBERT GIBB, MENZIES FERRI.

BEEKEEPERS!

Before you make your decision, be sure it is the Best.

CANNOT BE EQUALLED.

Abram's Famous and Reliable Stock.

The Beekeepers of Australia, New Zealand, and other parts, whose lives are spent in seeking for the best, all agree that only one strain will stand all tests.

WE HAVE THIS STRAIN!

Now Booking Orders for All Classes of Stock.

Queens, Nuclei, Swarms, Bees by the pound, with or without Queen, full Stock Hives, Combs of Brood, Etc.

SAFE ARRIVAL GUARANTEED.

The importance of having the best, has been clearly illustrated during the past drought.

Price List on Application.

W. Abram & Son, The Beecroft Apiaries, Berrima,
N.S.W., AUSTRALIA.

Beekeepers' Supplies

There are no Supplies offered which can compare with "Alliance" Goods in quality, The Price of them, whilst a little higher than some other makes, is more than compensated for by the Superior Quality of the materials used, and the greater care taken in their manufacture. In fact, our goods are the cheapest in the world.

Airco New Process Comb Foundation. Surpassed by no other makes;

New Refining Process; New Milling Process;

No Imperfect or Blemished Cells.

This New Foundation is made of clearer, cleaner Wax, possessing the true waxy aroma, and is made on mills which are without a spot or blemish. As every cell is perfect, no drone comb will be built. thereby effecting a considerable profit to users of

Airco Foundation. Nicely packed samples sent free on request. Secure one for comparison.

We have just landed ex s.s. Port Stephens a full range of everything Sundries required. Send in your orders now so that the goods may be on hand before they are wanted,

Export Tins and Cases.

The tins we supply are made by one of the best firms in the Dominion, and are guaranteed strong and sound. Our cases will be made from specially seasoned timber, strong enough to carry the contents to any part of the world.

Mr. R. J. Raymond says:- "For a Bee-master no queen is too good, no hive is too nice, and no equipment is too complete."

OUR SUPPLIES MEASURE UP TO THIS HIGH STANDARD.

ALLIANCE BOX CO., LTD.,

Telegrams-" Brickell." Dunedin. Post Office Box 572, Dunedin.

R. W. BRICKELL, Manager.

New Season's Illustrated Catalogue

sent free on request.

Just drop us a line when in doubt about choice of equipment. We maintain a service department for your information.

Reducer Competition.

II APPEARS TO OUR FIRM THAT BY OUR SILENCE UPON THE SUBJECT IT APPEARS TO OUR FIRM THAT BY OUR SILEMAY REDUCEDERS, WE WERE OF THE PROPOSED COMPETITION FOR COME HONEY REDUCERS, WE WERE OF THE PROPOSED COMPETITION FOR SUBMIT OUR PATTERNS FOR FURNISHED AS A SELECTANCE TO SUBMIT OUR PATTERNS FOR FURNISHED AS A SELECTANCE OF THE PROPOSED COMPETITION OF THE PROPOSED COMPETITION OF THE PROPOSED COMPETITION OF THE SUBMIT OF THE SU IT APPEARS A CONTESTITION FOR COMB HUNDER REDUCERS, WE WERE OF THE PROPOSED COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE OF THE PROPOSED COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR CUMB HUNDER REDUCERS, WE WE WERE COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR CUMB HUNDER REDUCERS, WE WERE COMPETITION FOR C

PETITION.
TO THOSE WHO HAVE ATTENDED THE ANNUAL FIELD DAY OF BEE. COMPETITION. WHO HAVE ATTENDED THE ANNUAL FIELD DAY OF REP.
TO THOSE WHO HAVE ATTENDED THE ANNUAL FIELD DAY OF REP.
TO THOSE THE STATE FARM AT RUAKURA, THOSE REMARKS WILL, BY
KEEPERS AT THE STATE FARM AT RUAKURA, THOSE ATTENDED ONE OF
APPLY, RUM, TO SUCH PRESONS WHO HAVE OF OUR FIRM TO MAKE A CAPPLY, RUM, TO FIRED DAY. KEEPERS AT THE SUCIE PERSONS WHO HAVE ASPIRE ATTENDED ONE OF APPLY: BUT TO SUCIE PERSONS WHO HAVE ASPIRE FAILURE OF OUR FIRM TO MAKE ASPIRE FAILURE OF OUR FIRM TO MAKE ASPIRED FROM THE FORESTION OF APPLICATION THAT WE WERE NOT IN FAVOIRS WITH THE ASPIRED FROM T MOVE IN THE DIRECTION OF A PUBLIC UMPETITION MIGHT REASONABLY.

MOVE IN THE DIRECTION OF A PUBLIC UMPETITION MIGHT REASONABLY.

RESEARCH AS AN INDIGATION THAT WE WERE NOT IN FAVOUR OP RESERVING OUR INVENTION.

Our Real Reason.

The actual reason for our indifference in this matter of competition has been The actual reason for nar indifference in this mutter of competition has been that all our rivals had predated such palphallo defects in their Machines that been that all our rivals had predated such palphallo defects in their way.—an end for any such way—at least from the predated such parts of the predated such par competition. Where to-day is there one of the nequeres anyertised that competed with the first BARTLETT.MILLER EDUCER at Ruskura in 1915, or that has ever with the first BARTLETT.MILLER EDUCER as Ruskura in 1915, or that has every sold to be competed since? Our Invention is the sold survivor, thus abundantly proving so competed since? so competen since: Our announced of the fittest, its claim by the law of the survival of the fittest.

Again, at least the only other party putting out a Reducer to-day in competition Again, at least the only other party pursuing our a reconvex usuary in competition with ours is placing a Machine no more like his Reducer exhibited at Rankstri last with ours is placing a Machine no more like his Reducer exhibited at Renkstri last with our is placing a Machine no more like his final business. Pebruary than onions are like peacanes. Naturary, the prospective purchaser asks himself (or herself) if the present pattern is to be final because deemed perfect, himself (or herself) if the present partern is to be anna because encement perfect, or whether the one he is now advised to get is so imperfect that in a few months or whether the one he is now advised to get it so imperious that in a row months longer it too will be discarded, as the same inventor has discarded in the last twentylonger it too will be discarded, as the same inventor has discarded in the last twenty, seven months some balf-dozen other patterns, each of which, while the furore of the new idea lasted, was to knock off their perches every Reducer under the sun!

When?

The thought will intrude itself into the mind of every person deciding to risk money in the purchase of a piece of extracting room machinery that may reasonably be expected to need an outlay only every twenty years or so:- "Am I getting a be expected to need an outlier only every twenty years of so. — And I greating a proved affair, or merely the extravagantly enthusiastic result of a mere novice's zeal in a belief in his own inventive genius?"

Is it reasonable to expect any such prospective purchaser to place so implicit a confidence as that which the BARTLETT MILLER REDUCER has earned so condusively during the seven years of its unaltered pattern, in a new and as yet publicly untried patters, which is so radical a departure from the same maker's Machine which he exhibited and demonstrated in company with ours at Ruakura last February that it is hard to believe that the same individual planned them both?

We ask ourselves, as we ask our readers, Is it worth while arranging a competition with a pattern that may in a few months go the way of the half-dezen other discarded patterns placed by this same competitor?

We think that every reasonable person will agree with us when we demur that when our present competitor has proved that his present invention commands his own confidence (which confidence in his present pattern we much doubt), it is then time enough to talk about public money-prize competitions.

Haphazard versus Expert Opinion.

We have the fullest confidence in the Manager of the H.P.A.. As a business expert, precisely the right man in the right place, Mr. Ryland is a god-send to the New Zealand beckeepers. Exactly because of this qualification he is absolutely nowhere as a beckeeping expert, and thus, when in the price-list of the H.P.A. he states that our competitor's Reducer "answers all requirements," we very respectfully ask Mr. Ryland to "wait a little bit," until be learns what our beekeepers require when thick honey comes their way: to state upon the mere ONE short demonstration he saw-with clean combs at that too-that this new and otherwise untried invention will answer all requirements, is at least to arrogate to himself a capability for judging where he cannot possibly—by the mere nature of his previous employment—possess any claim to pass any such enconium (or reflection) upon any Reducer. In any event, no prudent purchaser will buy with confidence a Machine with no more reliable recommendation than that of the inexperienced opinion of the Manager of the Firm which happens to have the Agency for the sale of it.

Therefore

To enable our readers and clients to pass a reliable judgment upon the matter, we will make our arrangements for a Public Competition, and as acarly as possible or exclude any and all favourtism,

The Competition shall take place either in the honey rooms of each respective inventor, or we will lend our own Factory for the purpose, seeing that we are so well setted for such a demonstration.

Each Competitor shall provide such sufficient quantity of black combs as will be to be such that the such that the

Bach Competitor shall select one of the Judges; these two shall select one other. (In this regard we reserve the name of one individual, which will be submitted to every Competitor before the selection, and which person we will not permit to enter upon our property.)

No Foul-brood Combs shall be brought upon any property upon which this competition shall be held.

The Judging Points shall be

(With the reservation that others, previous to the trial, may be substituted) as follows:-

QUANTITY OF HONEY MELTED	40 Points
Temperature of Honey on leaving Reducer—to be taken every quarter of an hour, averaged throughout the	
trial	15 Points
Clarity of Honey on Leaving the Separator	5 Points
Ease of Operation of Reducer	10 Points
Cost of Reducer, from the point of view of its possible purchase by the small Beekeeper	20 Points

Clarity of Honey we place lowest, because any Honey can be afterwards settled in the tank. Price we value highly, as it is easy enough to invent an expensive Machine, of no use to any but the big men

All slumgum to be weighed, and every pound to count as five pounds of honey. This is necessary, because it is impossible to calculate the amount in the combs, and that competitor having the most might thereby lose the Competition.

The Competition shall take place during March next, and all Entrants shall submit Reducers that have been on sale for not less than six months.

One month's notice to compete shall be given from each to each Competitor.

NOW THEN, BOYS, WHAT IMPROVEMENTS ON THESE TENTATIVE RULES ARE SUGGESTED? NO DOUST THE EDITOR WILL PERMIT OF THEIR PUBLICATION IN THE JOURNAL IF YOU WRITE AND ASK HIM! SEEING THAT THIS IS MORE OR LESS A PUBLIC MATTER. OUR FIRM WILL ALSO BE GLAD TO INSERT ANY GOOD AND REASONABLE PROFOSALS, SO LONG AS OUR SPACE WILL PERMIT.

NOTE.—WE HAVE LEFT OUT THE MATTER OF ANY OTHER PRIZE THAN THE REPUTATION GAINED BY THE RESULT OF THE TRIAL, ANY OTHER REWARD IS FOR OTHERS TO ARRANGE.

The Thoroughwork Apiaries Company

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.

New Zealand Go-op. Honey Producers' Assn., Ltd. (H.P.A.)

Head Office: Postal Address: Box 1293, Auckland. Stanley Street, AUCKLAND.

Telegraphic Address: "Bees, Auckland."

Open Letter to Beekeepers.

There are at present indications that the New Zealand Honey Crop for 1921 will be considerably greater than the quantity produced during 1920, and if these expectations are realised, there will probably be available for sale not less than 1,500,000 lbs. of Honey in excess of the amount required for domestic and other uses in New Zealand.

The disposal of this enormous quantity of surplus honey is the vital question in honey production. The disorganised condition of the world's markets to day, the world wide financial chaos, is already affecting the primary producer in this Dominion. For example, our surplus wool is practically a glut in the world's markets, and growers are being forced to accept prices less than half of what they confidently anticipated, and are even being forced into the position of having to hold crops in order to obtain something approaching payable prices at a future date. In other countries, in connection with cotton, wheat, sugar, etc., the markets have broken down, buyers are completely demoralised, and sellers are faced with onormous financial losses.

In most countries there is a strong public opinion at work in the so-far successful attempt to lower the prices of foodstuffs in particular. This has caused us to carefully examine the position of honey, world-wide, and to issue a note of warning to the

N.Z. Beekeeper.

Our Association fortunately had foreseen the present troubles and the necessity for educating the N.Z. public as to the value of honey as a food, and made it possible for the people to obtain a standard brand of honey all the year round. The efforts of the Association and its members to extend the "EAT MORE HONEY" campaign has led to the consumption in New Zealand being enormously increased. Our brand "Imperial Bee" Honey is to be found in every corner of the Dominion, and the sale is increasing by leaps and bounds. During the past twelve months we have distributed in New Zealand over 500,000 lbs. of this brand. This is a very unique record, and points to the fact that our Home Market will absorb still more Honey,

On the other hand lies the fact that a great number of people, including returned soldiers, are going into beekeeping, and this will result in a very large increase in production from 1921 onwards; thus we shall always have to find Overseas Markets for a fairly large quantity of N.Z. Honey.

During the present year our Association tried out many markets in various parts of the world, and were successful in selling large quantities of honey in America and elsewhere.

Unfortunately, all markets to-day are in a precarious condition. The price of Honey in America has dropped considerably, consequent upon the heavy production, the breakdown of the sugar market, and the inability to export owing to adverse

exchange conditions. For the coming season Great Britain will doubtless receive a large proportion of

our Honey, and new markets, if they compare favourably, will be utilised in addition.

Beekeepers from the foregoing will be able to realise that the question of prices for the coming season will entirely depend on bow the whole of the N.Z. Honey Crop is marketed. Our Association stands in the position of being able to market to the best advantage. It has its fingers upon the pulse of the New Zealand market as well as upon the pulse of Overseas Markets. It can estimate the quantity of honey which can be consumed in New Zealand, and by taking steps to prevent a glut in the Dominion can stabilise prices here as a first thing.

Its experience of foreign markets will enable it to successfully undertake the disposal of the surplus Honey. The Association stands for the Beekeeper all the while. It is truly co-operative, owned by the Beckeepers themselves, and concerned only with the matter of obtaining for the N.Z. Producer a permanently good return year

in and year out for the Honey which he raises.

To achieve these results, to prevent a slump in the Honey Market in N.Z., it is absolutely imperative that every Beckeeper in the Dominion who has Honey to association for disposal. Any other policy at the present juncture would be suicidal. All Beckeepers can become members on the easiest possible terms, and full information and all particulars can be obtained from Head Office.

Yours faithfully,

BENTON'S OUEEN-CELL NURSERY-INCUBATOR (Patent No. 43259.)

THE MOST MODERN IMPROVEMENT IN QUEEN-CELL NURSERIES.

Its advantages are such as to lessen the Cost of Producing Virgin Queens by fully one-third. It saves time, labour, and trouble, and many of the risks incurred in handling Cells: hence you cannot afford to be without one.

Do not forget, it is often poor economy to continue using out-of-date and inferior Appliances, when up-to-date and efficient Appliances are procurable.

THE BENTON QUEEN-CELL AND QUEEN NURSERY can be had in two sizes. The small size provides for the care of 16 Cells, and holds 6 half-depth Frames. The large size provides for the care of 48 Cells.

Send for descriptive leaflet and price of this proved success to the

SOLE AGENTS .

N.Z. Co-op. Honey Producers' Assn., Ld.

BOX 1203, AUCKLAND.

1920-21 PRICES OF ITALIAN OUEENS.

One or Two: 7/6 each.

Three or Four: 7/- each.

Five or more than Five. 6/6 each.

All orders accepted last season and during the winter months at last season's prices will be filled as agreed. Colour Range of Workers Guaranteed Leather Three-banded to Golden Four handed

TERMS.-Nett cash with order: Cheques to have exchange added. Any Queen arriving dead at original address replaced Free if Cage is returned

unopened. NOTES .- Owing to the increase in the price of sugar, postage, and all materials, No Reduction can be made on large orders.

All orders filled in strict rotation. Beekeepers should order early and avoid disappointment. In the best interests of Customers no Queens will be sent out later than the second week in March. This will enable Queens to be raised for wintering in the Nuclei, thus ensuring early Queens the following Spring.

Customers can rely on getting the best of Queens, and are assured of Absolute Freedom from Disease,

Inspection of the Apiary cordially welcomed at all times.

POSTAL ADDRESS:

J. H. TODD. Renwicktown, MARLBOROUGH.

PLEASE NOTE THE FOLLOWING:

Dept. of Agriculture, Industries & Commerce,

Blenheim, Sept. 15th, 1920. Mr. J H. Todd. Renwicktown. Sir,-Having examined every hive at your Apiary at Renwicktown, I have found no evidence of Foul-brood.

(Signed) A. P. YOUNG, Apiary Inspector.