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OFFICIAL ORGAN of the
NATIONAL BEEKEEPERS' ASSOCIATION
OF NEW ZEALAND
(Incorporated).

(An Organisation for the advancement of the Beekeeping Industry in New Zealand)

Better Beekeeping | Better Marketing

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Up to 60 colonies	....	0 10 0
Up to 90 colonies	....	0 15 0
Up to 120 colonies	....	1 0 0
Up to 150 colonies	....	1 5 0
Up to 180 colonies	....	1 10 0
Up to 210 colonies	....	1 15 0
Up to 240 colonies	....	2 0 0
Up to 270 colonies	....	2 5 0
Up to 300 colonies	....	2 10 0
Up to 330 colonies	....	2 15 0
Up to 360 colonies	....	3 0 0
Up to 390 colonies	....	3 5 0
Up to 420 colonies	....	3 10 0
Up to 450 colonies & over		3 15 0 (maximum)

An Associate Member shall pay 5/- per annum.

INSURANCE PREMIUMS:

1/6 per apiary per annum. (Insurance is voluntary, but, if taken, all of a member's apiaries must be covered.)

JOIN YOUR NEAREST BRANCH AND DERIVE FULL BENEFITS.

The New Zealand BEEKEEPER

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W. J. Lennon, Editor.

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VOL. 8, No. 4. NOVEMBER 20, 1946.

HOPE SPRINGS ETERNAL IN THE HUMAN BREAST.

Beekeepers begin the new season with the usual hopes and fears. When the bees are examined after the winter, things look well. Right up to willow flow, there is the surge of new life in the hive. The brood nest expands in size and the hive responds to the fresh inflow of pollen and nectar. The beekeeper wonders if he will be able to contain all this expanding energy within the walls of two or three boxes. Hives seldom progress at this alarming rate right up to the honey flow. One cannot have bees without using honey and pollen, and in most districts the month of November is a time of partial starvation. The reserve stores of honey are gone, pollen stocks are low and queens are restricting their brood area instead of expanding it. It is a matter of feeding sugar and hoping that the hives will be strong enough to gather a crop of honey if and when the flow does come. Instead of the early optimism one can almost see real pessimism. In fact, at this period, beekeepers wonder why they ever took the business on or stay in it. After a few early years of alternating hopes and fears one begins to realise that crops are gathered in spite of seeming impossibilities. It is a case of keeping cool, calm and collected and doing the right thing when it should be done.

Speaking in general terms, beekeeping in this country is tending to emphasise the value of the one-man unit. One man can direct his business as and when he wishes. He is not troubled with labour problems. The returned servicemen who are being established in the industry are more concerned at having a compact business, that will give them a living, with the comforts of an established home, than with wanting to be the biggest beekeeper in their district. There are large-scale beekeepers who are amongst the best in the country. If they had not been expert they would not have stayed large beekeepers, and it is pleasing to know that several of our servicemen have been able to complete their training under men of experience. Whether beekeeping is on a large or on a small scale, the important thing to aim for is maximum production. Too much of our beekeeping has been extensive rather than intensive. With the mounting cost of the capital equipment and transport required to become established in our industry, it is inevitable that attention will be directed to that size of business which will give the maximum return with the lowest capital and operating costs.

In the early days of beekeeping, a home apiary was the only apiary, and it contained up to two hundred hives. Motor transport opened up the development of the out-apiary method, sometimes with apiaries of only a few hives strewn about the country for miles. Out-apiaries are a part of our modern beekeeping, even to the one-man unit, with the difference that it is being recognised that the best results come from the business that is compact and intensively rather than extensively managed. It is probably a compromise between the earlier very intensive and the later very extensive method. It is amazing to learn of the production from comparatively small but well managed units, in areas that are not necessarily considered exceptional. Our industry would profit by emphasising more the return per hive than the number of hives.

NOSEMA APIS.

As we go to press, we are advised by The Animal Research Station that this disease has been discovered in various parts of N.Z. Possibly Nosema has been with us for years but not identified. It is a disease that attacks adult bees only and is evident by serious dwindling of the population of adult bees. Nosema is a spore-forming parasite that attacks the stomach lining of adult bees and so weakens them that they do not return from foraging. As it does not attack brood, the only diagnosis that can be made is on adult bees from the suspected hive.

Beekeepers who are suspicious should contact their Apiary Instructor for advice as to the best method of having tests made. It is not a matter for panic as the disease does not usually very seriously deplete a hive. Equipment from a diseased hive does not seem to carry the disease.

The Scientific Officers of the Department of Agriculture are working on the problem and we will look for a fuller report on the matter for next issue.

HEATED COMB AND TANK ROOMS.

An official report on this subject is to be made in the near future and we will publish it when it is available.

—Ed.

REMOVING SCUM FROM HONEY.

We have no better way to remove the scum and wax particles from the top of honey than to place a damp cloth over the honey, patting it down over the top so the settlings will adhere to the cloth and may then be lifted off with it. We have used this method since 1913 and believe that we originated the idea. Golden Crest Apiaries, Illinois. ("American Bee Journal.")

BEEKEEPING REMINISCENCES.

(From the "N.Z. Honeybee," August, 1938.)

Banquet at Timaru.

The twenty-fifth anniversary of the National Beekeepers' Association of N.Z. was celebrated in Timaru in June last at a banquet, the President, Mr. L. F. Robins, presiding.

The President described the first meeting of beekeepers he had attended at the Athenaeum, Oamaru, Mr. Earp also being present. There was no "national" then. Later, conferences were held in Wellington, Messrs. James Allen (Southland), Dick Bricknell (Dunedin), T. J. Mannex and Penn being prominent.

Mr. W. B. Bray said that he had been connected with the Association off and on—more often off—(laughter) since its formation. Between 1910 and 1913 the National went to sleep. Mr. Isaac Hopkins, he could tell them, was never at the Association's conferences except once. He stood off in the background and made shots for the lot of them to fire and they had been firing them ever since. He was their chief man in those days when they had a number of associations all over the place. Most of their members knew little about bees or about the Association. They had one shot at forming the National in 1910 and another in 1913. They had had some hectic times and some dull times. He remembered one session that ended in uproar. The chairman was trying to put a resolution—it was (the speaker's) as it happened—and the secretary got it down as carried. (Laughter.) It was submitted with other resolutions to the Government and it was the only one that the Government granted. Things were often run under "Rafferty rules"—everyone speaking at once, and a fellow could speak as often as he could. (Laughter.) There had been big changes in their time, and there would be bigger in the times to come. The Association would have a good part to play in the future (Applause).

Mr. Bates said the South Taranaki Association was formed in 1908, and in its second year it had 53 members; the number had dropped since then. In the early times there were numbers of small beekeepers, but only a few commercial men. Looking through the old minute books a number of well known names cropped up. Mr. Hopkins was a grand old man and always was mentioned when tributes were being paid to the industry. He owed to Mr. Hopkins whatever little advance he had made. As a youth working on his father's farm he had gone to Palmerston North on the occasion of the Winter Show. Mr. Hopkins had addressed a meeting and as a result he (the speaker) had made a start and had been able to carry on. He had met Mr. Hopkins on many occasions and had spent profitable times in his company. In the early days he remembered Mr. Bray at the Hawera Show demonstrating the transference of bees. Another pioneer was the late Dick Brickell. Few men had contributed so much to the success of the industry as that gentleman. He (the speaker) had run into him at the Palmerston North Show, where he demonstrated modern methods of extracting. Mr. Gibb was another prominent man, particularly in lecturing and instructing. He supposed that the man who had contributed most to the advance of the industry was Mr. Lenz, senior, who had given a practical demonstration of how commercial beekeeping should be carried on. The Association had gone out altogether for six years and did not function, but after the Great War it started to function again. He thought that the Poverty Bay Association was the oldest branch, but unfortunately it had broken adrift from the Association. Some of his hearers might remember Mr. Adams, who had a wooden leg and was quite a character. Amongst those connected with their Association were Mr. H. W. Gilling, who was instrumental in getting co-operative marketing going, and Mr. H. R. Penny.

Bicycle for Instructor.

Mr. Griffin, of the Southland branch, made the proud claim that it was the oldest branch in the Dominion. He had found the minute book giving the date, January 21st, 1906. Mr. Isaac Hopkins was present. There were still original members of the branch alive in Messrs. Doutt and Cole. The minute book contained many familiar names, such as Mr. James Allen and Mr. Robert Gibb. As an instance of the wonderful spirit of the pioneers of those days he mentioned Mr. May, of Island Block, who was working on a gold dredge in Central Otago. He used to cycle 12 miles to a railway station; from there he went to Gore where he stayed the night. In the morning he got the train to Wyndham and then started to go to the field day. At the end of the day, the proceeding was reversed. It took him three days and he lost 9s a day in pay and had to pay his own expenses. That was a very wonderful spirit. (Applause.) Mr. Earp was mentioned in the very early days of the Southland branch, and the branch was successful in getting the Government to provide him with a bicycle. (Laughter.) In 1908 they were successful in getting an inspector sent to the South Island; before that, apparently, the South Island was not inspected at all. He believed that Mr. Earp was the man sent to the South Island. He sincerely hoped, and they all hoped, that this jubilee year would mark the beginning of a new era for them, and that it would not be any longer possible for people not dependent on the industry for a living to force them down to a ridiculous level of livelihood. (Applause.)

Mr. Watson said that he would like to give them a brief outline of the history of one of the most important branches—the South Canterbury branch. He thought it started in Geraldine about 1908. In those days he was an amateur. They had a field day at his apiary at which Mr. Bowman was present, and as a result it was decided to form a branch. Mr. Grayson was the first President. Mr. Lang was secretary. Members of the branch had had some fine outings. They carried on till 1910. His first venture in sending honey abroad consisted of 10 tons, at an advance of 3½d a lb.; but when he got his account he found that he had to refund ½d a lb. (Laughter.) A notable

incident was when one beekeeper managed to buy a lot of old stuff and mixed it, and it was graded and got high marks. Some of the beekeepers made a song about this and during the dinner time the marks were reduced to 70. In 1914-15 they carried on with small meetings. Three of their members volunteered for the war—Messrs. Lang, Gordon Edwards and Dick Smith. From that time onward the branch was practically dormant and almost petered out. In 1926 they joined up with the National and were affiliated with the Waimate branch; from that time onward their meetings were held in Temuka. In the interval they had some fairly hard times. On many occasions three of them held their meetings in a motor car at Temuka; the same process was followed when meetings were held in Geraldine. They carried on till the Timaru branch, a very effective one, was formed.

HISTORY ON HONEY.

"Honey commences its career as an infinitesimal drop of sucrose (cane sugar) and water in the flower, called nectar. By intricate processes, part occurring inside the body of the bee, this is converted into dextrose (grape sugar) and levulose (fruit sugar) which constitute roughly 70 per cent. of the honey. There are other constituents, viz., the essences of the flower, the scented oils and gums which give honey its flavour and bouquet. Less obvious but greater in bulk and much more important are a variety of salts and minerals, iron, phosphorus, manganese, lime and sulphur, valuable because they are assimilable. The iron in numerous tonics, for instance, probably never gets into the human system at all. The iron in honey does. Then there are albumen, fats, waxes, formic and malic acids, nitrogenous pollen and last, but not least, some very complex digestive enzymes capable of such useful feats as converting starch into malt.

"Chiefly honey is a food, the only food that requires no digestion and passes directly into the bloodstream. It is a stimulant and a tonic. It has a strengthening effect on the heart and is a medicine for the liver. Its acids and salts make it a gentle laxative. It is a skin and hair food. It is a powerful antiseptic also; when next you cut your finger try applying honey as a bandage. The speed with which the wound heals will surprise you. If honey were nasty I believe more people would take it for its medicinal value. As it is, honey is bought almost solely as a sweet."

John Compton, in "Readers' Digest."

BEEKEEPERS DISCUSS POLLINATION, WITH AGRICULTURAL GROUPS.

Beekeepers representing 22 States and the Province of Manitoba met at Atlantic, Iowa, July 12 and 13, to discuss with allied agricultural groups the place of the honeybee in agricultural economics.

Several sessions of a panel discussion nature threw considerable light on the importance of honeybee pollination, and the ways by which orchardists, agronomists, and soil conservation interests could assist the beekeeping industry and assure controlled pollination.

Bees in the Orchard.

The session on Honeybees in Orchards and Gardens was conducted by George Rea, retired Extension Apiarist of Cornell University, and Wm. H. Collins, Secretary of the Iowa State Horticultural Society.

It was pointed out that the biggest obstacle in the path of orchard and garden pollination was the big loss of honeybees by arsenate and DDT poisoning. Orchardists are gradually beginning to show more caution in the use of sprays, and avoiding spraying or dusting during the period of full fruit or vegetable bloom.

Orchard rentals only partially compensate the beekeeper for the cost of moving colonies of bees into and out of orchards and fields, the partial loss by poison, and the disturbance of the colonies caused by moving that disrupts queen laying and broodrearing. (In the States of Colorado and Michigan, cherry growers appear more co-operative, as a whole, than apple growers.)

Many bees are lost when poison is picked up with pollen from dandelions and other cover crops grown in the orchards. Not only are the field bees killed, but young bees within the hive die later, when feeding upon the stored poisoned pollen.

In New York State over 15,000 colonies of bees are used in orchard pollination, and in Michigan, cherry growers unable to rent colonies of bees, purchased hundreds of colonies and hired beekeepers to operate them.

Considerable study now reveals that evener pollination is secured when hives of bees are well distributed rather than being grouped throughout the orchard.

DDT.

There was plenty of evidence that careless application of DDT was taking a heavy toll of honeybees. Word came during the meeting from Woodrow Miller, the nation's largest beekeeper, that he had lost 40 per cent. of his bees around Blythe, California, by DDT application on vegetable crops.

Dr. J. E. Eckert, University of California, reported that 18,000 colonies of bees were killed last year in California by poison applications, 7,000 more were crippled or injured and taken out of the pollination picture. It appears that DDT can be used at the rate of two pounds per acre, but that there is a definite need for improvement in application equipment.

Cranberries are a high priced crop, and Dr. C. L. Farrar, U.S.D.A. Bee Culture Laboratory, at Madison, Wisconsin, told of experiments conducted in the bogs of northern Wisconsin. Tests showed 42 per cent. larger crops where bees were used in increasing pollination.

Some success has been reported in coaxing bees to work pear blossoms. These blossoms, low in sugar content of nectar, are not attractive to bees if other blossoms of higher sugar nectar are present in the same area. A little lavender applied to the blossoms of a tree have fooled the bees into doing a good job of vital pollination.

Honeybees and Legumes.

This session, Honeybees and Legumes was conducted by Prof. H. D. Hughes, Farm Crops Section, Iowa State College.

The lack of pollination appeared a factor in the statement that the Federal government had spent 12½ million dollars in one year in an effort to increase legume seed production. Hughes stated that it took this country 100 years to get wise to the fact that European red clover seed was not adaptable to American soil and climate. Leaf hoppers did consider-

able damage to the European "hairless" red clover seed. The American "hairy" seed is not as attractive to bees as the hairless, but the search continues for a short corolla red clover hybrid that will make honeybee pollination more thorough.

Madrid sweetclover seems to hold much promise for the beekeeper, the seed grower and the stock raiser, for it is a heavy producer of nitrogen, flowers and seed. Of the Madrid, the second yields more nectar for the bees and more seed for the farmer.

Spanish sweetclover is proving quite popular and is being bred for resistance to beetles, and for low cumarin content. (Cumarin is believed to be the cause of bleeding in some cattle.)

Sweetclover of high cumarin content must not be allowed to grow as high as the heads in wheatfields, for the clover will taint the grain and spoil it for milling. The ideal sweetclover would be four feet in height, low in cumarin, would bloom about June 8, would have a fine stem, and if cut when eight to ten inches in height would bloom three weeks into August. This clover would be the answer to the dream of many a farmer and beekeeper.

Birdsfoot trefoil got plenty of attention. This plant, popular with the bees, is being used more and more as a mixture with Kentucky bluegrass for pasture. Iowa tests have shown maximum beef production when stock was grazed on this type of pasture. Birdsfoot trefoil will not winter kill, does well on poor soil, and will stand heavy grazing from April through December. It not only is a deep-rooted drought resistant plant, but also has a wide range of soil tolerance.

Trifolium ambiguum, sometimes known as Pellett clover, is proving popular as pasture clover and in soil conservation projects. Its heavy mat of deep underground root stock gives promise in many permanent meadows.

Alfalfa seed growers have awakened to possible increased seed yields when honeybees are present. This is particularly true in the irrigated areas where 40% of the bees visiting the blossoms were in search of pollen, 10% in search of nectar. It has now been definitely established that honeybees are credited with tripping more alfalfa blossoms than formerly. And research is being conducted to develop an alfalfa that trips more readily.

Soil Conservation.

Saturday morning's session on the relationship of the honeybee to the national soil conservation programme was conducted by Dr. E. H. Graham, Chief Biologist, Soil Conservation Service, Washington, D.C.

Dr. Graham informed the group of 250 representatives that soil erosion was a problem on the farms of George Washington and Thomas Jefferson, and that serious consideration to this problem was given by these early master farmers. To-day, one billion acres of land in the United States, one-half the total area, has been destroyed by erosion. Erosion is a serious problem in other parts of the world: Australia, New Zealand, South Africa, and the Punjab area of India.

In 1937, 236,000 acres of alfalfa in this country yielded three and one-half bushels per acre, but in 1945, 836,000 acres yielded only 1.37 bushels per acre. This loss in yield is attributed to poor land practice and lack of insect pollination. In 1925, 814,000 acres of red clover produced three bushels per acre; while 2,256,000 acres in 1945 yielded only 1.78 bushels per acre.

Coloured slides illustrated methods to control soil erosion: contour farming, strip farming, terracing, use of waste spots, and pollination of plants to assist in establishing firm cover crops.

Graham pointed out that alfalfa rates high for soil of slight acid characteristics, and that honeybees are a real benefit in tripping alfalfa blossoms, to cause good seed setting.

Beekeepers were asked to co-operate with soil conservation committees and wild-life organisations, for these organisations were indirectly concerned with the same problems.

Birdsfoot trefoil, and lespedeza are very popular with the soil conservation folks, and are popular honey plants.

—The Beekeepers' Magazine.

MARKETING IN OTHER COUNTRIES.

THREE THOUSAND TONS OF AUSTRALIAN HONEY WANTED FOR 1946 BY GREAT BRITAIN.

The Director-General of Agriculture, Commonwealth Food Control, Mr. F. W. Bulcock, has advised the Secretary of the Federal Council of Australian Apiarists' Association that information recently received from the United Kingdom, indicates that the authorities there are anxious to obtain 3,000 tons of Australian honey during 1946.

It is realised that the uncertain honey flow in several States and the continuing lack of some essential materials will make the completion of this high import quota a most difficult task, and the Director has asked that the producers be informed of the position so that a special effort might be made to obtain the desired production.

The Director also points out that the fulfilment of this order would not only be of direct assistance to the United Kingdom, but might prove an important factor in the development of the future market for our surplus honey in later years.

—Australian Bee Journal.

U.K. NOW IMPORTS CANADIAN HONEY.

Canadian honey, to the extent of 500,000 pounds, may be exported to the United Kingdom, the imports having been approved by the British Ministry of Food. Of this quantity, 250,000 pounds should be shipped in one-pound consumer containers and 250,000 pounds in bulk. Imports into the United Kingdom are authorized under licence confined to the members of the Honey Importers and Packers Association having previous experience in the Canadian honey trade. The members are expected to communicate with firms that supplied this market before the war. Export permits from Canada, issued by the Export Permit Branch, Department of Trade and Commerce, are required.

—Canadian Bee Journal. August, 1946.

HONEY PRICES.

By J. L. Burgoyne, Kirkmichael, Ayrshire.

During recent discussions with other large and small honey producers, a dissatisfaction with returns from honey sales during the past two seasons has been very prominent. The average return of surplus per colony is, of course, the main profit determining factor, but even so, some ground does exist for present dissatisfaction with the 1941 controlled prices under which our sales are made, at least of those which are made above the counter. Judging from the many offers we receive for our honey—of up to double the controlled price—the public are willing and anxious to pay more than the maximum, 2/9 retail, for white honey. Considering also that honey is about the only home-produced food upon which the whole burden of the low controlled price is borne by the producer, this suggested review of values is not unreasonable. Neither will anyone deny that values have changed somewhat since 1941. Also in view of their additional service to the community, in the fertilisation of pastures, fruits and vegetables, beekeepers are deserving of at least equal treatment with other food producers.

—The Scottish Beekeeper.

ENGLAND.

MAXIMUM RETAIL PRICES FOR HONEY.

Imported: ½lb., 1/-, 1/0½; 1lb., 1/9. **Home Produced,** except Heather: ½lb. 1/6; 1lb., 2/9; in containers larger than 1lb., 2/3 a lb. Home-Produced Heather: ½lb., 1/10; 1lb., 3/6; in containers larger than 1lb., 3/- a lb. **Honey in Comb,** other than Heather: 2d. per ounce. **Honey in Comb** (Heather): 2½d. per ounce.

FEEDING BEES DRY SUGAR.

After making a talk on feeding bees dry sugar, at the Southern Conference meeting held at Greensboro, N.C., I have received many enquiries for information on the subject. For the past four years a number of Georgia honey producers, package shippers and northern beekeepers have co-operated with me in experimenting with feeding dry sugar on a commercial scale. This method has proven successful, especially as a labour-saver.

Dry sugar can be used successfully in place of sugar syrup and has some advantages over feeding syrup. It eliminates the cost of cans, jars, inside trough feeders and other type feeders. It takes longer for the bees to invert, or use, the dry sugar, therefore it lasts them longer. As it lasts longer it saves the beekeeper time, gasoline and truck wear. One man can feed a whole apiary in less time than it takes to mix and prepare syrup. It eliminates the excitement and robbing that feeding syrup causes. As dry sugar is in the most consecrated form it saves wear on the bees while inverting it, for sugar syrup, regardless of the sugar content, has to be evaporated and inverted, which causes extra wear on the bees.

Dry sugar can be used for winter stores if fed before cold or freezing weather. It can be used to prevent starvation in the spring in colonies that do not have enough stores to last until the honey flow starts; used in commercial queen production and in shipping package bees; used to introduce queens during a honey dearth; used to instal package bees and to lessen the loss of bees and brood due to bees working some types of poison plants or loss from poison dusting or spraying.

There are two methods of feeding dry sugar, one on the bottom board and the other on top of the brood nest. As most package shippers operate one story colonies they use the bottom board method. Honey producers have extra supers and can either feed on top of the brood nest or on the bottom board. I like the bottom board method best, as it is faster. Raise up the front of the hive 18 inches, so the sugar will fall to the back of the hive, and pour in 5lbs. dry sugar, set the hive down and put in an entrance check. The reason for the check is to keep the bees from fanning and carrying out the sugar on their legs as they go in and out of the hive. If more feed is needed, feed 5 lbs. again in 10 to 15 days, depending on the weather and colony strength. To use the other method, remove all supers above the brood nest, place one sheet of newspaper over the brood nest, put on an empty super, pour in 5 lbs. of sugar and replace the supers. Two feedings are sufficient in most cases, as this is equivalent to 20 lbs. of syrup mixed half and half.

A day or two, after you feed the sugar, if you examine the entrance you will find small white pellets that look like grains of sugar. If you taste them you will find they are not sweet, but are probably crystals with the sugar content removed or a filler in the sugar. Do not jump to the conclusion that the bees are wasting the sugar. Bees in strong colonies will carry a small amount out on their legs if the sugar is not placed well back from the entrance.

Do not wet or dampen the sugar, as it causes the sugar to harden like hard candy, which delays the bees in inverting it. Do not feed in freezing weather while the bees are clustered and expect them to consume the sugar. Do not pour the sugar into dry combs to feed, as sometimes the combs become damp and the sugar hardens. Then the bees cut out the comb to get the sugar. Do not feed drone laying colonies or weak, queenless colonies, or weak colonies with a half pound of bees, as it is a waste of sugar and time.

Next time you have to feed try a few colonies with dry sugar and see how you like it.—A. V. Dowling, Valdosta, Georgia.

—The Beekeepers' Item.

PRESENTATION.

On July 16th, the opportunity was taken at a small gathering of beekeeper golfers, in the Matamata clubhouse, to present Mr. J. Rentoul with a cheque contributed by the beekeepers of N.Z. who attended the Conference in Auckland. In making the presentation, Mr. Trownson said that the contributions had been made with the utmost goodwill and friendly feeling. A similar presentation had been made to Miss Hamilton, head clerk, and Mr. Woodford, head storeman, of the honey store, who were about to be married.

Mr. Rentoul, in thanking Mr. Trownson, said that the occasion was hardly appropriate for speeches in view of the urgency of the game that was waiting, but he would like to express his appreciation of the kindly thoughts of the beekeepers as expressed in the gift. He said that he was particularly gratified that the long service of Miss Hamilton and Mr. Woodford had been recognised. Both could not have done more in giving efficient service had the business been their own. The saving of costs and the interests of beekeepers generally had always been the first consideration of these two loyal workers.

In speaking of his connection with the marketing side of beekeeping, Mr. Rentoul said that it had been more or less wished on him. At the election of the first board of directors of the H.P.A., it was necessary for the directors to sign a joint and several guarantee for £8000. Two of the directors decided to resign rather than take the responsibility. Mr. Rentoul was asked to fill one of the vacancies, which he did cheerfully, signing the J. & S. with the other directors. On a certain occasion, when a skeleton had been discovered in the poison honey area, the opinion of a man named Cullen was sought. The skull was an unusual one with a very low forehead and of a queer narrow shape. It was thought that it might be the remains of an early type of man. Mr. Cullen did not think so. In fact he said, "I don't know, I don't think so. I think it is one of them blokes that signs 'joints and severals'!" Cullen was again called in on the poisonous honey matter. Everything was supposed to be very confidential and no public mention was to be made of the matter. Apparently Cullen was a free-lance correspondent and the matter got all the publicity it did not want. Mr. Rentoul related several more experiences of his connection with the honey industry, and again expressed his appreciation of the goodwill shown by the beekeepers.

Mr. Ray Clark then stated that Mr. Rentoul had been made a Life Member of the National Beekeepers' Association, which would entitle him to attend and take part in meetings.

In stating his gratification at the honour conferred on him, Mr. Rentoul said that at one time he was intimately connected with the Association in that he served a period as President.

SOUTH ISLAND BEEKEEPERS MEET.

A meeting of the South Island members of the National Beekeepers' Association was held in Dunedin on Thursday, 14th November, to consider developments in the honey marketing situation and the significance of the N.Z. Honey Suppliers' Association.

Speakers present by invitation were: Mr. H. F. Stoupe, manager Honey Section, I.M.D., and Messrs. T. E. Pearson and W. T. Herron, South Island members on the Honey Suppliers' Association Executive. An apology was received from Mr. E. A. Field, Dominion President of the N.B.A.

The speakers addressed a representative gathering of thirty members. After a full discussion, the following resolution was carried:

"THAT THIS MEETING EXPRESSES TO SOUTH ISLAND BRANCHES OF THE NATIONAL BEEKEEPERS' ASSOCIATION ITS LACK OF CONFIDENCE IN THE SUPPLIERS' ASSOCIATION TO ACHIEVE UNITY AND ORDERLY MARKETING."

THE BRAND CAPPINGS MELTER.

By W. J. C. Ashcroft, Havelock Nth., Hawkes Bay.

Beekeepers have always wanted a melter to take the cappings direct from the knife or plane leaving, at the end of a day's extracting, the wax in nice cakes and the honey in the tanks, unimpaired by heat. The Brand cappings melter is a fairly successful answer to this demand. The following is an account of operating experiences with a Brand, first the Junior size and then the Senior, since 1938.

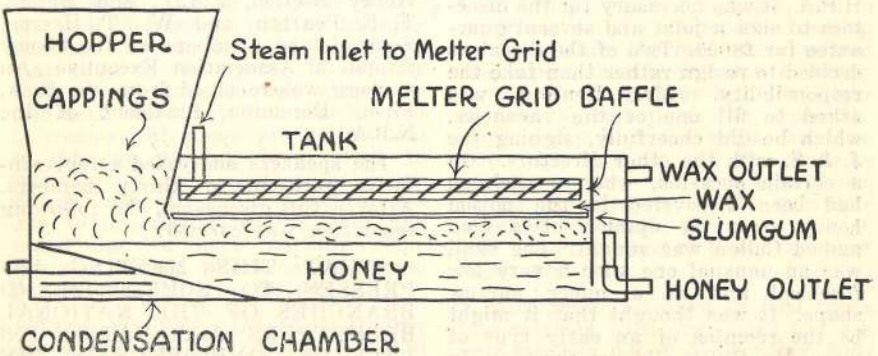
Unlike most other melters, the cappings in the Brand fall through a hopper to the bottom of the tank. Here an adjustable honey outlet pipe holds the honey removed with the cappings until the whole mass is floated up into contact with a steam-heated grid of copper pipes in the top part of the tank. The wax then melts and eventually runs off through an outlet just above the level of the grid, although this does not happen until up to 300 combs have been uncapped. When working, there is a layer of melted wax round the grid with the slumgum underneath, then the unmelted cappings, and, lastly, the honey well away from the heat. In practice, the temperature of the honey ranges from one hundred to two hundred degrees and, if this honey is led directly into the strainer along with the cool honey from the extractor, it cools quickly to a safe temperature, while the warmth imparted to the cool honey helps it through the strainer.

We found that the junior size would comfortably handle cappings from a ton, and the senior from two tons, of honey per day.

The steam supply, however, requires very much more than the exhaust "from plenty hot knives," as claimed by the maker. For the senior, we used a 3000-watt, four gallon electric boiler, steaming away eight to twelve gallons of water each day of eight hours, to run the melter and the cappings plane. An ample steam supply is absolutely essential as, paradoxically, too low a temperature in the melter grid means too high a temperature of the honey, causing discolouration.

In working, the honey outlet pipe is screwed up to the top level for the start, until the cappings from about 1200 lbs. of honey have fallen into the hopper. Then the honey outlet

SECTION



"BRAND" TYPE CAPPINGS MELTER

pipe is screwed down, which brings the honey level well below the hot grid, and kept there till just before the end of the day's work, when it is screwed back to the top position and all of the wax run off. The makers recommend that the honey be then run off by screwing the outlet pipe to the lowest level, but we found it was much better to first allow the molten wax left behind to solidify round the melter grid. This makes it much easier to remelt this wax when starting again and the little extra time the warm honey is left in the tank does not seem to impair it. When commencing the next day, two or three sixties of liquid honey are poured into the tank and the steam turned on about two hours before commencing uncapping. It is very important to see that the melter has all free wax melted before starting work, as lumps of wax or slumgum will upset the balance of melting and cause discoloured honey.

In conclusion, we found the Brand melter a very convenient and expeditious method of dealing with cappings. The honey obtained, while not quite as good as that from drained cappings, particularly for packing liquid in glass, was a very good sample.

NUCLEUS HIVES.

It has come to our attention that a number of beginners bought nucleus hives in the Autumn for carrying through the winter. As these hives have not been provided with sufficient stores or bees to be carried over the winter, they have suffered serious loss. The sale of such nuclei might be satisfactory under some conditions, but where it is late delivery of spring orders, at a spring price, it is a practice that merits some investigation. Where servicemen or others consider buying, they would be wise to consult the Apiary Instructor for their district for advice before accepting delivery of nuclei except at the agreed time.

BREEDING BEES TO TYPE.

(By G. Swanson, Strathwick Apiaries Maitland R.D., Gore.)

Most beekeepers agree that bees and queens vary in character and in type. The greater the variety of types, the greater the variety of results of individual hives. Over the last two centuries, all breeds of domestic animals and birds have been gradually bred to conform to certain types to suit the individual needs and taste. From the various types are developed strains.

In dealing with bees, we are dealing with an insect that is just about as variable as human beings. To develop a strain of bees with fixed characteristics requires years of patient work and close observation of their habits and temperament and the results of their labours. All characteristics in bees and in queens are variable, but by careful breeding this variation can be considerably reduced. To attain any degree of success in breeding bees, it is essential that we select the proper type, of which the main essentials are those of good honey gathering ability, non-swarming habits, good constitution and temperament.

The progeny of a breeding queen should have the above mentioned qualities plus the ability to pass on those qualities to future generations. Once the characteristics of the type become fixed, it becomes easier to develop a strain. A good queen cannot be solely judged by her looks. She is judged by her work in the brood nest and the results of the labours of her progeny, as well as the length of her life. If the apiarist selects a breeder from which he raises numbers of queens that vary considerably in size, colour and temperament, he will know that he has selected a type without the strain being fixed.

Few commercial beekeepers in N.Z. are in a location where they can procure 100% pure matings, hence the difficulty of producing a fixed strain of bees. Should a beekeeper occupy an area in which he has apiary sites covering a radius of approximately ten miles, the matings should be about 95% pure, provided his stock is pure and he is situated somewhere near the centre of his locality. The tendency for queen breeders to seek a warm congenial climate for the purpose of breeding queens in mass production for the sake of a greater financial return is not a sound one from the viewpoint of improved breeding. My contention is that bees bred for a long number of years in a cold climate, and where the summers are comparatively short, are superior to bees bred in a warm climate. This contention opens up a wide field for investigation.

INTENSIVE v. EXTENSIVE BEEKEEPING.

During the past few decades there has been a tendency to spread out, to have more hives of bees, in more locations, in order to produce more honey and make more money. This has resulted in a wider distribution of bees over given areas which has been beneficial from the standpoint of pollination. At the same time it has meant, in many cases, a higher operating expense, less efficient supervision of apiaries and perhaps lower per colony yeilds of surplus honey.

The present tendency is retraction —fewer apiaries, with more hives in each apiary—which should mean lower operating expenses. Whether or not this results in a higher per colony production depends largely on the type of apiary management applied.

In the final analysis it is the high per colony average of surplus honey that counts. There is a vast difference between hives of bees and real colonies of bees. It is frequently possible to have perhaps a dozen very populous colonies that will actually store more surplus than three dozen colonies of mediocre strength.

It is intensive rather than extensive beekeeping that counts. In making this statement we do not wish to discourage the operation of outyards. What we are trying to say is—each beekeeper should aim to get maximum results from all colonies, which means intelligent apiary management.

—"Gleanings."

"FREEDOM FROM WANT."

STORY WITH A STING.

"Blimey! They must be wonderful people there!" Who are "they" and where is "there," and who made this remark and why?

For the answer go back to the year 1940, the year after war had started. It was then that Miss Holland, who at that time was Headmistress of Woodford House School in Havelock North, Hawkes Bay, conceived the idea of sending tins of New Zealand honey to the men of the British Navy, those serving on the smaller craft, minesweepers, etc. The idea was at once translated into action, and the school had a fete which raised over £700—the nucleus of the "Honey for the Navy" Fund. They went one better in the following year: a further £1,500 was raised in the same way, and to this was added nearly £500 more, subscribed by the girls at the school and by the Old Girls. That year saw no less than 23,930 lbs. of New Zealand honey sent through the co-operation of the Navy League to England for distribution to the Navy. In each of the subsequent years the girls and the Old Girls raised several hundred pounds for the same purpose, with the magnificent result that in the space of six years £8,000 was raised and 51 tons of honey despatched. After the war was over, and the Navy's need not so pressing, one and a-half tons of honey went to U.N.R.R.A. Owing to the bad season in Hawkes Bay we were not able to procure more than this amount.

There should be little need now to explain that those "wonderful people there" are the girls, past and present, of Woodford House School, Havelock North.

In spite of the difficulties and risks of war time, all the honey sent arrived safely, with the exception of a couple of packages to which someone, with more of a sweet tooth than a conscience, helped himself while the honey was in transit on the New Zealand Railways. The many letters of thanks received from the Navy (the initial quotation of this article being from one of them) leave no doubt as to the appreciation of this gift; indeed, could the bees read, they even might pardonably blush with pride. Unobtainable in England during the war years, honey was a real luxury, especially in winter time when the seas were cold and bleak. One can picture the "series of wide and sticky grins (as one officer described it), on the faces of the crew after they had absorbed the contents of their honey tin."

The bees of New Zealand, the apiarists of New Zealand, the International Marketing Board, the various other organisations, and authorities have all generously helped the Woodford House Honey Fund to achieve its purpose. If the bees permit, and the beekeepers are willing to help with supplies, this good work is not going to be allowed to lapse, there still being money in hand for the purchase of honey, and no lack of places where it is needed to which to send it.

"Woodford" hopes to send 15 tons of honey in 1947 to U.N.R.R.A., and has the promise of 7½ tons. Would any apiarist be willing to supply a further 7½ tons, or part thereof? If so, please get in touch with the Secretary, Woodford House, Havelock North, as soon as possible.

HONEY FOR THE NAVY.

Copies of letters received during 1944 and 1945.

Navy League Seafarers' Comforts Supply,
Trafalgar Sq., London,
20th October, 1944.

Dear Madam,—We have just received 9,000 pounds of honey in 150 cases shipped through the New Zealand Navy League War Council, Wellington, and are informed by Mr. Darroch that the honey comes from Woodford House Girls' School and Old Girls' Association.

This magnificent gift from your school is most welcome and my Committee asks me to express to you and your girls their sincere thanks and appreciation of this further consignment for the benefit of the men of H.M. Fleet. The honey has come at a most opportune time, and the Admiralty have asked us to send a large part of it to men who are employed in transport and other duties in connection with operations in North West Europe. We know that it will be very greatly appreciated in these craft.

Mr. Darroch also informs us that a further large amount of honey is on its way, and says in his letter that the total quantity sent by your School comes to 40¾ tons. We can assure you of our deep

appreciation of this really wonderful effort and are certain that those men who have received your gifts have been very grateful, as we find that the honey is most popular with the sailors.

We will acknowledge the 249 cases mentioned in Mr. Darroch's air mail letter of 30th August as soon as they come to hand.

With renewed thanks and our best wishes for Christmas and the New Year

Yours sincerely,

P. SANDILANDS,
Lieut-Colonel, Royal Marines,
Secretary.

H.M.T. Cape Melville.

In the first place I am afraid I haven't the slightest idea how one should address the pupils of a school or its "Old Girls." Mesdames sounds awful, Dear Pupils worse, and Dear Old Girls terrible. Having cleared that little matter up, thank you all very much indeed for a ten pound tin of honey which was received by the crew of the minesweeper on her return to her British Port. All you people in the Dominion are so very good to us, and even if we do not show our appreciation very markedly, we do feel that we owe you a very large debt which we can never repay. England looks not too bad, but as there has been practically no paint since the war the buildings are rather drab; and of course there are many gaps where they have cleared the bombed buildings. Everybody gets enough to eat, though variety is a thing of the past. For instance, my child who is a month younger than the war has never seen a banana, and until recently had never seen a lighted street lamp. My home town is Stratford on Avon, and if ever your smaller pupils do not know who was born there, I think you require a new English mistress.

Again very many thanks.

STANLEY GEE, Lieut., R.N.V.R.

M.T.B. 723.

Thank you for your splendid gift of honey. It is a very superior quality, in excellent condition, and a practical reminder of kind friends at home and abroad who are helping to keep the Services in comfort. And of course we do not come across any honey any day of the week, and most certainly not in buckets. Thank you again for a fine gift.

W. WATKINS, S/Lt. R.N.V.R.

H.M.T. Lombard, London.

I am taking this opportunity to write your Association a short letter of thanks. This ship has just received, through the agency of the Base Chaplain, a large tin of honey. This crew, my First Lieutenant and I, as Commanding Officer, all join in in saying how delighted we were to receive this almost forgotten delicacy. I can assure you that there will be a series of wide and sticky grins when the honey has been distributed and consumed. I am equally confident that none of the honey will go uneaten, for the crew of a minesweeping trawler, such as ours, seem eternally voracious and can best be described as vacuum cleaners where the consumption of food is concerned. Once again, thank you very much.

E. A. ARCHER, Lieut, R.N.V.R.

Fleet Mail Office, Great Yarmouth.

I thought it might interest you to know that honey was recently distributed amongst all the ships at this base. Each man received nearly half a pound. In the ordinary way honey is more or less unobtainable, in any case it is not made available to the Navy! You can well imagine therefore that the honey was eagerly received and as eagerly eaten.

T. W. REED, Lieut, R.N.Z.N.V.R.

London.

Many thanks for a tin of honey which we received with your compliments. The crew was very pleased to have a change from our usual ration, which on these small craft can be rather depressing at times. As I am the only New Zealander on board I thought I would take this opportunity of thanking you and letting you know how much these lads appreciate your kindness. For them it is especially welcome as they have to live in very cramped quarters and our cooking facilities are anything but the best. Once again with many thanks.

G. M. O'NEILL, Sub.-Lieut.

H.M.S. Watchful, Gt. Yarmouth.

We have just received your magnificent gift of N.Z. Honey from the girls of Woodford House School. I assure you that it is most welcome, and it is going to seagoing ships and W.R.N. sick quarters. We have minesweepers and M.T.B.'s here, and the North Sea in winter is pretty bleak, so that your gift is doubly appreciated. I have asked the different ships to write to the School.

G. W. BROWNE, Chaplain R.N.V.R.

H.M.T. Richard Crofts, London.

I am writing to convey my very sincere thanks on behalf of my ship's company for the delicious tin of honey received. We very much appreciate your kindness and especially so as the gift has come from far distant New Zealand. We form the crew of a minesweeping trawler and I can assure you that honey is a luxury which we haven't enjoyed since the good old peace days. Let us hope that those days will not be far distant. The crew and officers send their greetings and best wishes.

D. J. BRITTEN, Lieut, R.N.V.R.

H.M.S. Meynell.

We received yesterday the nicest gift we have had for ages and ages, a very large tin of honey. Boy is it good. You have no idea how much your gift is appreciated. Thank you very much indeed. Funny thing, but I've been over here nearly three years, and though I have heard of these and similar gifts, this is the first time any of it has come my way.

A. H. GARRINGE, Lieut., R.N.Z.V.R.

H.M. L.C.T, 7092, London.

We received two large tins of honey from you and I am writing to thank you very much from all members of the ship. The honey was very gratefully received and we cannot tell you how much we enjoyed eating it. We hope you are all very well in New Zealand, and that when all this mess is over, who knows, we might have the chance of seeing you and thanking you in person. We cannot do it very well on paper, but I hope you understand how

grateful we feel towards you, and the grand work you are doing.

ROY THOMPSON, Midshipman R.N.V.R.

H.M.S. Scimitar, London.

I would like to express my thanks and that of many more on board for the donation of honey which we received and for which we are truly thankful. We all think it is very good of you to think of us this way. I hope you don't mind me writing this way, but I thought it was only right to thank you for your fine donation. If you know of any girls that would like a pen pal, I would gladly oblige and would answer all letters.

NEVILLE GILES, A.B.

H.M.S. Pincher, London.

The members of this ship's company have recently been the recipients of the almost forgotton luxury of real honey, so kindly presented by you for the use of the Royal Navy. I desire, on their behalf, to offer my most sincere thanks for your generous gift. Coming as it does from a country so many thousands of miles away makes the fact so much more appreciated, and I can assure you that the pleasure given would have exceeded your highest expectations.

In an effort to make your good action seem a little more personal, and in the hope that it will provide you with knowledge of one ship that your gift has reached, I am enclosing a photograph of "Pincher." Best wishes and again my deepest thanks.

C. S. BLAKE, Lieut.-Cdr., R.N.V.R.

H.M. R.M.L. 496, London.

Just a line to let you know where one of your gifts of honey went to. We are a small patrol boat attached to Light Coastal Forces of the Royal Navy. The crew wish me to extend their thanks for a luxury we seldom see.

DEREK BOOKER, Sub.-Lieut., R.N.V.R.

YOUR SUBSCRIPTION.

As the Journal mailing list is purged after this issue, members will be wise to see that their subscriptions are promptly paid. Subscriptions due for the current year will need to be paid to ensure receipt of the February issue. As some time may elapse before the quarterly returns are made to the General Secretary, Branch Secretaries can help by advising the Editor directly of the names of members who have recently renewed their subscription.

LEAFLET ON POLLENATION.

As a result of several inquiries for the article on page 23 of the May, 1946, issue of "The N.Z. Beekeeper," the Editor has had a number of reprints made. These are in the form of a three-page leaflet at 10/- per 50. A limited number is left.

Apply to The Editor.

SWEET CLOVER.

By Geo. Paton, Lincoln College, Christchurch.

The following are a few notes I have collected about sweet clover. I am in the process of growing three varieties to note their reaction to our conditions.

It appears that sweet clover (Bokhara clover), melilotus alba, is coming into favour again. Before harm is done by over anxious enthusiasts praising its merits, without reference to its drawbacks, beekeepers may well protect what may become a very useful plant to them by getting the fullest and most accurate information on it. The plant was tried in N.Z. years ago and rejected because of undesirable characteristics. In several American states in the past, it was declared a noxious weed. By reasonable care, its disadvantages can be minimised, particularly if one knows what they are.

To me the point of the matter is: what place can this crop occupy in a rotation better than those crops already doing the job? This cannot be answered until several years' trials over many different soil types have been carried out. We should withhold our judgment till this is done. The more recently produced varieties will have to be tried as well.

Utilisation. It may easily be fitted into a rotation and is adaptable to a greater range of soil types than our common clovers in N.Z. In America it is largely used for pasture and soil improvement. First year hay may approach lucerne in feeding value. Second year growth may be some seven feet in height. It leaves the soil in excellent condition for succeeding crops and survives drought as lucerne does.

Place in Rotation. It will be used mainly on arable farms and this therefore is likely to preclude its use in North Island farming. It can be sown with autumn or spring wheat or barley. It could be sown in the spring alone or with rape and grass. To obtain maximum growth in the second season, it is better to graze lightly in the first season. The biennial crop gives best results as a green manure crop and is best ploughed under in the spring of the second year after growth from the crown buds has begun. For better erosion control, spring ploughing is preferred to autumn ploughing.

Varieties. Common white (Melilotus alba) is the type known here. Evergreen (m. alba) is another biennial white selected for growth, lateness and finer straw. It has done well in Nebraska. It competes very favourably with weed growth in establishment. It begins second year growth before Common White and matures three weeks later. It would appear to be worthy of a trial in this country. As hay, Evergreen produced 2.75 tons per acre average over its two years, as compared with 1.62 tons for Common White.

From F. C. Pellet, Iowa, I have the following information: "Sweet clover has been the principal source of honey for most Iowa beekeepers during recent years. Because it is the one plant which yields nectar abundantly, that has been within reach, beemen have shown far greater interest in sweet clover than in any other plant. Difficulty in getting a stand of alsike or red clover has made it necessary for many to use it who would have preferred something else. Probably the best strain that we have tried for bee pasture is Arctic sweet clover. It appears to be the one which N. E. Hansen brought from Siberia. It is very drought resistant, and a strong grower with coarse stems, blooming until very late summer.

Alpha sweet clover is a finer stemmed dwarf type selected from the Arctic. It lacked sufficient leafiness to make it attractive for hay. Bees neglected the flowers for birdsfoot trefoil. After several years of observation we are unable to find much of promise for Alpha here.

Melana sweet clover has a long flowering season. Under farm conditions with competition of strong growing weeds, it failed to make a good showing. It is an annual. It offered the finest bee pasturage and appeared to be well suited for use as a hay crop when hand weeded. In some parts of the U.S.A., Melana and Alpha have not been of much use for bee forage. It remains for us to try them here. Melana, Alpha and Arctic are being tried here.

Liming and Inoculation. The better the seed-bed the better the growth. Liming at the rate of one ton per acre should improve the crop considerably. Inoculation is necessary as for lucerne, using the same culture.

Hard Seed. To overcome this trouble, it would be wise to have the seed scarified, i.e. the seed is rubbed on a roughened surface like an emery paper.

Seedbed. This should be fine, firm and weed free as for lucerne. Drill lightly about half an inch deep and do not harrow. When of good germination, 12 to 15lbs. per acre, depending on the condition of the seed-bed, is the rate for seeding.

If hay can be made from other plants, it would be preferable to use sweet clover as a pasture or as a crop for ploughing in. First year hay may be cut after buds have formed on the root crown. Second year hay may be cut before flowering, leaving stubble a foot high.

Maximum soil benefits from sweet clover are derived from its use as a green manure crop. The biennial type is best suited to soil improvement, using the variety that has proved most satisfactory for forage production. Annual types make less growth. It increases the yield of following crops. "Lucerne, red clover or rape is superior where these crops thrive." Henry and Morrison, 1943.

Seed Production. Bees are necessary as the plants cross fertilise. It is predominantly a cross-fertilised crop. It ripens unevenly owing to its long flowering season. It is best suited to harvest when three quarters of the seed pods have turned dark brown to black, with an ordinary binder under which trays or canvas may be placed at the end of the platform and table to catch shaken seed.

References:

Report of State Apiarist, Iowa.
Sweet Clover in Nebraska. Bulletin 252.
Canterbury Chamber of Commerce Bulletin, "Sweet Clover."

FROM ONE HOMEMAKER TO ANOTHER.

Dear Sally:

We are having the most glorious weather here; it's really more like mid-summer than spring. Consequently everyone is rushing the season, and our annual church lawn party was moved up last week. We bring the refreshments, usually sandwiches and cakes, so this year I made a Honey Layer Cake with an orange filling. It disappeared like magic and everyone has been asking for the recipe. I though you might like to have it too.

HONEY LAYER CAKE.

½ cup shortening
½ cup sugar
½ cup honey
2 egg yolks
2 cups sifted cake flour
3 teaspoons baking powder
¾ teaspoon salt
¾ cup milk
½ teaspoon flavouring
2 egg whites

Cream shortening thoroughly. Add sugar and honey, beat until mixture is light and fluffy. Add egg yolks and beat well. Add sifted dry ingredients, alternately with milk. Add flavouring and fold in stiffly beaten egg whites. Bake in 2 layers at 350 deg. F. for 30 minutes.

Note: Spread Lemon, Fig or Orange Filling between layers. If you desire a Chocolate Flake Cake, fold in with the beaten egg whites 1 cup chocolate flakes made by cutting unsweetened chocolate finely, or putting chocolate through meat grinder.

ORANGE FILLING.

2 tablespoons sugar
2 tablespoons flour
½ tablespoon lemon juice
⅓ cup orange juice
¼ cup honey
Grated rind of 1 orange
1 egg, slightly beaten
1 tablespoon butter

Mix ingredients in top of double boiler and cook until thickened. Cool and spread between cake layers.

Now that my housecleaning is pretty well taken care of, I've been doing a little re-decorating. We painted our kitchen and I have been making oilcloth covers for my cook books to match the woodwork. They add quite a decorative touch and are so easy to keep clean.

I was getting thoroughly disguested with my crop of broken nails and skinned knuckles from trying to pull open our drawers. The warm damp weather makes them swell and stick so that you have to call in the two strongest men in the block to pry them loose. But the other day I found that rubbing laundry soap on the parts that stick makes them slide with the greatest of ease. It is also good for creaking doors.

Since the children have started wearing light cotton dresses the laundry bag is fuller than ever. I used to have to wash the coloured ones so carefully to keep the colours from running, but now I just add a little Epsom salts to the water, 1 teaspoon per gallon of water, and they all "stay put" beautifully.

Speaking of laundry, have you heard about the new "pint-size" washing machines? They are about as large as a hat-box and take up to three pounds of wet wash. You can plug them in anywhere and fill them through a hose which can be attached to a faucet. I was thinking that I should have had one when we took that long motor trip with the baby a few years ago. I could have done his washing en route. I imagine they would be marvellous for people who send most of the heavy pieces out but like to do their personal things at home.

It is time to call the children in for dinner now, so I had better seal this so Bill can mail it on his way to the meeting to-night.

Affectionately,
HONEE.

BEEKEEPING IN AUSTRALIA

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NOTES FOR BEGINNERS.

By "Skep."

Last time I left you with full notes on the control of swarming, together with some diagrams to illustrate the methods suggested. By the time these notes appear, towards the end of November, many of you in the Northern latitudes will have had occasion to do something about the matter of swarming tendencies. All reports of the season to date indicate that the spring has been cold and backward. Hives have not been able o gather much from heath in some places, or from willow or fruit bloom in most places. Dandelion has been some help, but the general effect of continued inclement weather has been to retard the normal progress of the hives. If you have not observed good beekeeping practices you will be loud in your condemnation of the weather. But if your beekeeping has been good your only worry will be lack of stores—honey and pollen. Those who have observed the rules faithfully will not be unduly worried.

If your "closing down" in the Autumn was carefully done, your hives should not be unduly worried, over the poor Spring weather. By this I mean that if you left them with a good queen and ample stores of honey and pollen, in a two-storied hive, the only thing you should be concerned about now is the amount of honey and pollen because the poor weather will have prevented the bees from gathering to supplement the stores. This is where your reserves of honey and pollen in the honey-house will stand you in good stead. Feed it out now and keep the brood rearing up to maximum. The bees bred now are the ones that will gather most of the honey crop. If you starve the colony now you might have only half the necessary bees and half the bees necessary will gather only about one quarter of the possible crop. If you have no honey, feed sugar. The bees will likely be able to forage for sufficient pollen. There are districts where there is too much pollen and beekeepers there are fortunate.

It is easy to say that you should aim to have a maximum population of bees in each hive, but the trouble is to keep them there. The whole aim of commercial beekeeping—and amateur beekeeping should be the same on a small scale—is to get very strong hives and keep them there to gather honey. Swarming is an evidence of poor beekeeping and it is for that reason Skep spent so much space and good Association money on printed diagrams in the last issue to help you. We would like to print more diagrams and photographs, but the Editor says that each one costs 16/8, so we are limited in the number we can have in each issue.

GETTING THE CROP.

It is not enough to have strong hives at the right time. As soon as the colony becomes too populous for two supers add a third. In fact try to learn to add your supers just before they are needed. Indications of the need for more room are the building of nice white wax between the top frames and the roof, undue fanning at the entrance, wax building in spaces that are too wide within the hive, bees hanging outside the hive is a serious sign, the building of queen cells within the hive, honey being sealed and deposited in outside frames, and several others you can add yourselves.

Of course if you are running for section honey the methods adopted are different from those used to produce extracted honey. Just before the main honey flow you reduce the two-storied hive to one full-depth super below, giving the queen all the space for egg-laying that you can provide. Place a queen excluder over this single box and add at least two half-section supers above. If the hive is very strong, you might require to add more. The principle behind this method is to crowd the bees into the section supers and so force them to work something they are not really keen about. As the sections near finishing, they are kept to the top and new ones added below. By raising the sections to the top, the bees do not have to travel over the white wax and so stain it. As soon as they are finished they should be removed

from the hive. You need to watch the queen below for conditions of crowding and swarming more closely than you do in running for extracted honey. For goodness sake do not attempt this method unless you are prepared to work it properly. It means more work but also more honey and better finished sections.

It is wise to clean the sections carefully and to get them to the market as soon as possible. This is honey in its natural and most delightful form, because it is just as the bees stored it.

There is only one point I want to emphasise regarding extracted honey and that is in respect to fine grain. Having extracted the honey and strained and settled it in your tank leave it for two or three days so that fine particles of wax and bubbles of air can rise to the surface. Skim it carefully to remove these and stir in some fine-grained honey that I wrote about a year ago. Unless you have a very quick-granulating honey, leave it for another day and stir carefully again before you run it in to your containers. Even a strong-flavoured honey is improved out of all measure by having a fine grain. Then store your honey in a cool place till it granulates. If you can place it where the temperature is between 50 degs. and 57 degs., you will have the ideal conditions for good granulating in a fine grain.

A SUGGESTION.

One correspondent has written in to suggest that bees will work new foundation more quickly if it is smeared with sugar syrup. He issues a warning that the foundation so treated is better put in the hives in the evening to minimise the tendency to rob. Of course bees can be given foundation to draw out when there is no honey flow, but sugar syrup must be heavily fed. When conditions are not right, foundation should not be placed in the hive. There should be no need either to smear with syrup or to feed the syrup.

Foundation is best given to bees when a honey flow is on and, provided there is a good population of young bees, the wax will be drawn readily without any encouragement. It is not good practice to add foundation until the hive conditions are right for it. One method commonly used to retard swarming is to add foundation in the brood nest, after removing some of the drawn combs. Even if one of the ideal conditions of a good honey flow is not present, the other condition of masses of young bees desiring to build comb, is present. "Satan finds mischief for idle hands to do," so give them wax to build. SKEP would not recommend painting foundation with syrup. Learn the principle of natural wax building by the bees and try to apply it under our controlled conditions.

I wish all readers a Merry Christmas and a Happy New Year, as well as a good crop of honey.

Kindest regards,

SKEP.

BRANCH NOTES

These are too conspicuous by their absence this issue. The Editor would like to hear from secretaries for the next issue.

FAR NORTH.

After Conference the Editor visited the two northern branches at Whangarei and Kaitaia. A very pleasant time was spent talking with the members at each centre and trying to learn something of beekeeping problems in the North.

Whangarei is about 200 miles from Auckland and Kaitaia about another 200 miles further north. As this distance, including return to Auckland, was covered between Monday and Friday, mostly by service bus, it was too hurried for more than sketchy impressions to be formed. The first part of the journey was by train to Whangarei through low winding valleys. Although the time was mid-July, clover was in flower in Auckland and at later stages bees were seen working manuka. To cap the lot bananas were seen growing outside in the Far North! Everything was green, as the North had made a splendid recovery from the earlier drought.

On the Wellsford railway station, cut daffodils were cased ready for despatch to the Christchurch market. Right through to Whangarei, green pastures and manuka and gorse seemed to be competing for possession. Whangarei gave the impression of a growing and prosperous town with a beautiful setting of hills and harbour. Every home seemed to have its orange and lemon trees.

Places passed on the road to Kaitaia were Kawakawa, where the railway line runs down the main street, Ohaeawae, which means "Splashy Water," and where there is a sign to Ngwha Springs—pronounced like "Narfa." Such names intrigue one and make the traveller want to return to know them better. A side trip to historic Russell in the Bay of Islands took one past historic Waitangi. In this area hilltops show clearly the old Maori system of defence by palisade and trenches—a defence in depth. It is a reminder of the days when Maori and Pakeha, and even Maori and Maori, fought bitter battles often over trivial matters. One could not help wondering if our Pakaha beekeepers have learned much since the days of the Maori, when apparently bitter verbal battles are sometimes fought over trivial matters. A night in Russell was an experience in a tropical thunderstorm. Water came down in sheets and thunder and lightning disturbed the quietness of the lovely bay.

The final leg of the journey north to Kaitaia was an experience in rapid bus travel that gave the lie to State lethargy in business. Kaitaia appeared finally as a haven, after being hertled across country. It was some comfort to have the driver's assurance that they kept to schedule each day in safety. It was a pleasure to discuss many matters with a keen group of amateurs and it was a proud traveller who left the North with two samples of very fine honey. Was it imagination that suggested banana flavour?

Everywhere in the North there is manuka. Beautiful farms suddenly stop at a fence, and fern and scrub show the need of patient and constant work. In one low-lying area it was a surprise to see hay stacks built upon a base of piles. The traveller from the South is always impressed at the lack of wide areas of flat land in the North. Everywhere one meets the Maori people. About fifty per cent. of the Northern population is Maori. It was a sight for sore eyes to see good farming practice in the old Waipu forest area. One wonders if it is due to the Scottish emigrants who came from Nova Scotia! One noted quite a lot of "Macs" on the letter boxes, and the repetition of the same name, which indicated some form of family settlement. As one neared Auckland the line of the tank ditch that was part of our recent defence system was still evident, although bulldozers had filled it in.

There is much more the Editor would like to know of the North, and he hopes to see more of it in future years.

WEST COAST.

We have brief report that Mr. Glynn, the efficient secretary for many years, has resigned to take up beekeeping in Southland. Go South young man! We understand that Mr. Glynn was recently met by members and presented with a cheque. We look for a fuller report in the next issue. Mr. Glasson succeeds Mr. Glynn as secretary.

WAIMARINO.

A Field Day was held by the members of the Waimarino Branch of the National Beekeepers' Association on a recent date, at the apiary of Mrs. Reichel, Ohakune.

Mr. L. A. Johnstone, Apiary Instructor, for the district, was present, and a very good attendance of the local beekeepers showed clearly the enthusiasm.

The guests were welcomed by the hostess, Mrs. Reichel, after which a visit was paid to the hives. Mr. Johnstone first of all gave a demonstration showing the new method of chloroforming bees. This method will be most helpful in working bees in adverse conditions.

When this demonstration ended Mr. Johnstone demonstrated the fitting and use of Queen Excluders. Many questions were asked as to the advantage and disadvantage of the queen excluder. He then went on to explain the cause of robbing and the best method of preventing this aspect of apiculture.

As the afternoon was drawing to a close, the party adjourned to the residence of Mrs. Reichel, where afternoon tea was served. During the afternoon tea period Mr. Johnstone gave a very interesting talk on the work of his Department during the war.

The afternoon closed with a vote of thanks to our hostess, Mrs. Reichel.

R. YOUNGMAN.

(Sorry, Waimarino, that this was crowded last issue.—Ed.)

WHAKATANE.

On Tuesday evening, 21st May, 14 members were present at the Beekeepers' meeting, held at Mr. Hubbard's residenc. Mr. Hubbard, the President, welcomed Mr. Paterson, the Government Apiary Instructor, and after the usual preliminaries the meeting was handed over to Mr. Paterson, who showed some films of various apiaries in both the North and South Islands. Particularly interesting were those depicting the necessity for having the hives properly fenced off from cattle, and one beekeeper's ingenuity in overcoming the unwelcome attentions of a billy goat was quite amusing.

The results of careless beekeeping were also illustrated.

After showing the films, Mr. Paterson gave an interesting talk on Feeding Bees, and the various methods employed were described. It is essential that bees have sufficient food to carry them through the winter, and a good beekeeper will see to it, when taking the honey crop, that he leaves the bees ample stores for the winter, as nothing can equal their natural food—capped honey. The feeding of sugar syrup should be resorted to only as a last resort.

We always appreciate a visit from our Apiary Instructor, and our only regret is that he cannot visit us more often.

D. C. PETTY.

CORRESPONDENCE

Dear Sir,—The August "Beekeeper" contains much in the way of addresses, also a letter in the correspondence column—all dealing with the shortcomings of producers. Is it not amazing, Mr. Editor, that the wise men who see failings in others do not use their wonderful knowledge to cure the evils they complain of?

The I.M.D. requires 1000 tons in order to run economically. Very well, let the I.M.D. make an honest offer of the full export return, and the amount will be over-subscribed. According to the Control Board the producer "can hardly be blamed" for neglecting the I.M.D. when the season is poor. Now rising costs are similar in effect to poor seasons, and at times we have a combination of the two.

With regard to a subsidy, the Board assures us that the Government is a hard taskmaster. Agreed! It then goes on to state that the suspension of the levy would mean a reduction of honey prices. If that is so, Stabilisation means that certain producers are not to recover increased costs. Really, we have a surfeit of theory and advice.

Mr Len Box's letter states that "saner beekeepers are in a quandary." If the saner beekeepers are those who doubled production in 1920-30 and met a falling market, one would rather think that they would be mad at the fear of a repetition, because they know the I.M.D. and its advisers endeavour to fit the industry to a theory rather than use sensible methods.

ALEX. MAWHINNEY.

Te Kawa.

A NEW SOURCE OF SWEET.

Recent news items convey information to the effect that the Regional Research Laboratohy at Philadelphia has developed a new syrup from apples. It is reported as containing the same sugars as are present in honey but in different proportions. With more levulose and sucrose and less dextrose it is said to be sweeter than honey.

Apple growers have been faced with declining markets for some years and the new product is a result of the search of new outlets for the surplus fruit. It is reported that already large users of sugars have placed orders for more than a million pounds of the new syrup.

The pressure of war demands is bringing forward many new products which will have an important influence in many markets now peace is restored. In this new syrup we may find another competitor for honey and one which is more like our product than any now in the market.

It would be strange would it not, if the apple which depends upon the honeybee for the distribution of pollen to insure a crop, should one day provide the most serious competition for the product of the hive.

—American Bee Journal.

LABEL PASTE.

Mix honey and wheat flour, two parts flour to one of honey. Add boiling water for the right thickness. This is fine for labels on tin and has other uses such as on wall paper which will not stick with ordinary paste. (Harry T. Starnes, in "American Bee Journal.")

SIMPLE METHOD OF REARING QUEENS AND REQUEENING.

By M. J. Deyell.

During the season of 1943, we tried out a method of rearing some extra queens at one of our commercial honey producing apiaries in Western Ohio. It was so satisfactory that we are going to pass it on.

There really isn't much to it, in the way of equipment, except to have some extra single-story hives with combs at the side of the apiary, in a convenient spot. The hives we use are double queen mating hives like those used by the late Mel Pritchard. Anyone can have them. Each ten-frame hive has a tight fitting division board in the centre. **This is the only extra equipment needed.** The inner cover is cut in two and the two halves fit to the tight division board with extends ⅝ inch above the lower side of the inner cover. It is necessary to plug, with wood, the small spaces that occur at the sides of the tin rabbetts. The entrance to one side or compartment faces one direction and the entrance to the other compartment faces in the opposite direction. These entrances may be provided for when assembling the bottom board. We use the ⅝ inch side of the bottom board, thus reducing entrances down to smaller dimensions than would be the case if the ¾ inch side of the bottom board were used. We like to have about a dozen of these double queen mating hives at each commercial yard which allows for rearing about 24 queens.

Very Little Labour Involved.

As we check through an apiary during late May or early June, we may find a colony that is very populous and perhaps has some supersedure cells. When a colony is superseding its queen at that season of the year, we remove the old queen and introduce a young laying queen from a Southern breeder, because we want a laying queen in the hive as soon as possible. Provided the stock is good, we take a comb of brood with the supersedure cells and adhering bees and place it in one of the mating hives. Bees from another comb of brood of the same hive, with plenty of young emerging bees, are shaken into the mating hive containing the comb with cells. All the old bees will return to the parent hive. We have an empty comb on one side of the comb containing the cells, also a comb with some honey on the other side. The entrance to this mating hive is reduced down to small dimensions. When these mating hives are made up during a honey flow, there is little danger of their being robbed out.

As we check through more colonies, we may find a very strong colony that is making prepartions for swarming. We may find some nice cells that are not yet capped over. If the colony is extra populous, we may make up two nuclei in mating boxes from this strong colony in the manner just described, being sure to put plenty of young bees and honey in each compartment. Removing cells, brood, and bees from a populous colony ready to swarm is a swarm control measure. Care must be exercised in handling combs containing queen cells that are not capped over. The queen larvae are easily injured in unsealed cells. Sealed cells may be handled in the ordinary manner without much danger of damaging the queens.

Direct Introduction of Queens.

It is well to have a system of record keeping for each nucleus hive. In due time, barring unfavourable conditions for mating, most of these mating hives will contain vigorous young queens. It is well to permit the queens to lay for a time, if possible. The next time the commercial apiary is checked, we are likely to find some queenless colonies or perhaps colonies with failing queens. Each failing queen should be destroyed and the colony left queenless for at least three to five hours or until the colony realises its queenlessness. Two frames of brood with queen and adhering bees are then lifted out of a queen mating hive and placed in the centre of the brood chamber of the queenless colony. The two combs which are removed, to

make room for combs with the queen, are put into the mating hive or exchanged for the combs taken out. It is well to have at least one comb with some eggs or lavae in the mating hive in order that a new queen may be reared in the event that a cell is not available.

A queen that is laying eggs normally is more likely to be accepted than is a young queen that has travelled in a mailing cage for a number of days, and is dried up and runs around like a virgin queen. It seems that a laying queen with two combs of brood and bees is protected from the bees in the queenless colony by her own bees until the new queen, bees, and brood have acquired the odour of the colony. There may be, and doubtless are, honest differences of opinion on this matter.

If an undesirable young hybrid queen is found and removed it may be more difficult to introduce by the method described. However, if there is a fairly good honey flow on, this method will work in the majority of cases. If little or no honey is coming in, the queen should be placed in a cage with a little candy in the end to permit the bees in the colony to get acquainted with her before she is released from the cage.

If, perchance, all of the queens in the mating boxes are not needed during the season they may be permitted to lay until about October 1 in this latitude. Each compartment will hold five combs although we rarely put in more than four. In the fall the division board may be removed from each nucleus hive containing queens and one of the entrances closed. One of the queens in each double mating hive will be disposed of by the bees and the other retained. The nuclei will unite, making a fair sized colony for increase.

We find that queens produced by this method are satisfactory, the equal of, and sometimes better than queens purchased from breeders. It is a convenience to have some extra queens on hand in each apiary when needed. This simple method gets away from grafting young larvae into artificial queen cell cups, also other manipulations which are rather technical for the average beekeeper.

—'Gleanings."

HONEY HOUSE PLANS.

Herewith we begin our series on the plans and layout of honey houses. We do not print any plan, or offer the descriptions with the idea that they are perfect. We offer them to you as they are; some have serious imperfections; some will not suit you or your conditions; they may be too elaborate or too simple, but we offer them to you for criticism and comment. We have two more in hand for the next issue and the promise of others for later dates. We would like others with accompanying plan or photographs, together with a description by the operator of the way it works. We would even like the writer to indicate the weaknesses in his plan. Honey houses are like other houses in which we live in that none seem to be perfect. In fact after building from what seemed to be the perfect plan, defects have become obvious after living in the house.

Honey houses are not always built to a plan because they are often buildings that have ceased to serve their original purpose and have been adapted to the work of an apiarist. Sometimes the stud is too low or too high, or the arrangement of windows, doors and plan, prevent a good arrangement. Like houses, there is not always an original plan to work from and like Topsy they have "just growed up." Nevertheless, in spite of all the disadvantages that might be mentioned, it is possible to have a good and workable arrangement that will do the job in almost any building, provided certain basic principles are observed.

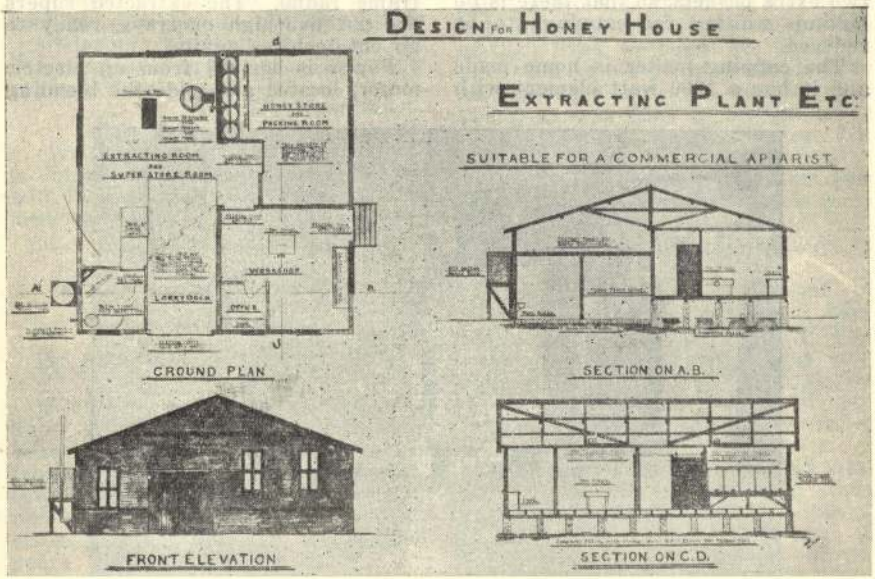
We want to discover those principles from an examination of the plans we print. When we have examined the good and not so good points, we will make a list of the features necessary in a good and efficient honey house. The Editor would welcome your comments and suggestions.

Editor,—

Re your appeal for photos and description on Honey House, I am enclosing description of my recently disposed of plant and shed now owned by Mr. J. D. Lorimer at Hamilton.

In the lay-out of this my son and I have tried to reduce man-handling to the absolute minimum.

The honey house is built on a level section, but the floor is on two levels.



The top floor is slightly higher than truck level and the bottom practically on the ground.

At the apiary, the honey is loaded into the truck, but the supers are placed on individual drip trays, which in turn rest on special wood trays which are raised about one inch by means of wood slats fastened at each end so as to enable a specially made hand truck to be used at the honey house when unloading. The metal tongue of this hand truck slides right under the raised wooden trays and is as long as the breadth of the supers. By its use three full supers or five empties can be wheeled off or on to the truck from the floor of the honey house at one time with the expenditure of very little energy.

The floor round the uncapping stand and the extractor is covered with flat galvanised iron to facilitate cleaning up. The uncapping is done with a steam heated knife, the steam for which is generated by an electric boiler.

Inside the uncapping can are two wire backets 24in. x 15in. x 10in., suspended from the sides of the can. These facilitate a very rapid draining of the cappings and, when full, they are lifted from the can directly into the electric melter. We have two extra baskets, so that there is no hold-up waiting for cappings to be reduced.

The capping melter is home made and it has a 1000 watt element with a three-heat switch. It holds all four baskets at one time. We do not aim at melting the cappings right out, but to release the honey. The cappings are reduced to about two inch thick blocks which, when cooled, are tipped out in one piece. A 35-gal. copper and steam wax press do the rest.

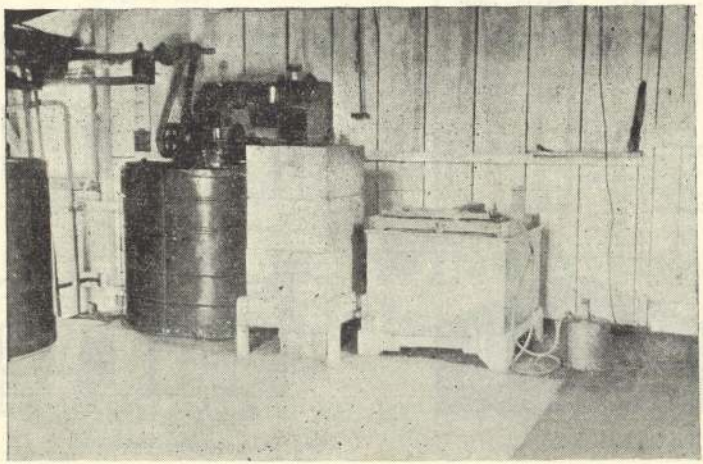
The honey from the cappings drains directly into the strainer below the extractor. From the extractor, honey flows into quarter-ton tanks and is then pumped up and through an Ireland heating shoot and strainer, and can then be distributed to any of the ton tanks on top floor or to the two ton blending tank on the bottom floor.

All tanks can be run out individually or the honey can be blended without any man-handling.

The blending tank is equipped with a paddle that revolves very slowly. The starter can be tipped in the top and there is nothing more to do until the honey is ready for tinning. The tank is sufficiently high for a 60 lb. tin and scales, or a table for filling small packages on in comfort.

During uncapping, the combs are put back in supers alongside the extractor until there are sufficient to load the extractor, which is a 42-frame radial. The extracted supers are put five high on trays, ready to go out to hives again.

Power is derived from an electric motor, located alongside the blending



tank, and is taken to one overhead shaft from which a saw bench also can be driven.

Full 60 lb. tins are loaded directly into motor truck and taken to the cool store, about a mile away, for granulating, although this may not be necessary now under the new grading regulations.

A. H. DAVIES, Hamilton.

(We understand that Mr. Lorimer is further improving this plant. We will hope to have an article at a later date.—Ed.)

MAN 999 YEARS OLD.

By Robt. Black, Tauranga, N.Z.

If our scientific and medical men knew as much as the little worker bees we often see collecting nectar from the garden and other flowers, they could arrange that the human race would live, barring accident, diseases and wars, for about 1,000 years instead of going out at the average of 64 years. Quite often the worker bees, which live an average age of only 15 weeks, are confronted with a problem when their queen dies suddenly and they have no warning to enable them to provide cells and get the queen to lay in them, so as to ensure the continuation of the life of the colony.

So they go to a worker cell containing a worker larva not more than three days old and enlarge the cell and proceed to transform the worker by feeding it with a mysterious substance, the name of which has not been found, but for convenience we will call it vitamin Q.

The change is almost unbelievable. Instead of taking the usual 21 days to emerge from its cell as an untreated worker would, it arrives in 16 days a full-sized queen which will often live for 5 years or 15 times longer than the worker would have lived without the treatment of the vitaman Q. The mental attitude is also altered, for although this transformed being has a sting it seldom or never uses it for anything but killing a rival queen, while if it had not had the corrective dose of vitamin Q it would, like the worker, sting with little or no provocation, as many people know too well.

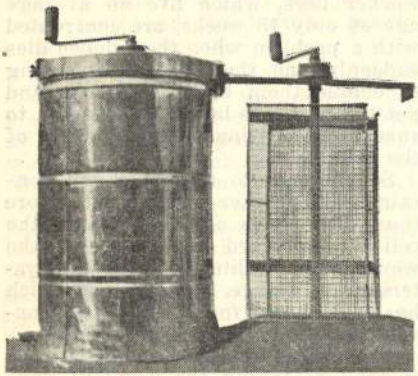
If our scientific or medical men could isolate this vitamin Q and apply it to human beings at the right stage of their lives, we might see the average span of 64 years multiplied by 15, and thus increased to about 999 years, as was done in biblical times thousands of years ago, before the art of longevity was lost.

The discoverer of penicillin has done much for humanity, but there is room for greater wonders ahead when man has isolated and put this vitamin to work.

Already educated men, some of them of the medical profession, have spent 50 or 60 years of their lives working among bees, and they candidly admit that among the mysteries they have seen, there are still unfathomed depths they have yet failed to sound.

Who will be the discoverer of vitamin Q, and will it be by deep study and investigation, or will the door of knowledge be accidently left open to reveal the greatest discovery of the age?

A BOON AND A BLESSING TO BEE-KEEPERS



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Hand-driven, non-reversible, 2-frame basket, made of heavy gauge galvanised wire mesh, with heavy galv brackets, geared 4 to 1. Baskets supported on ¾in. galv. shaft, reversing on a brass spigot. Drum made of Tinned Steel 27in. high x 17in. diam Drain Plug.

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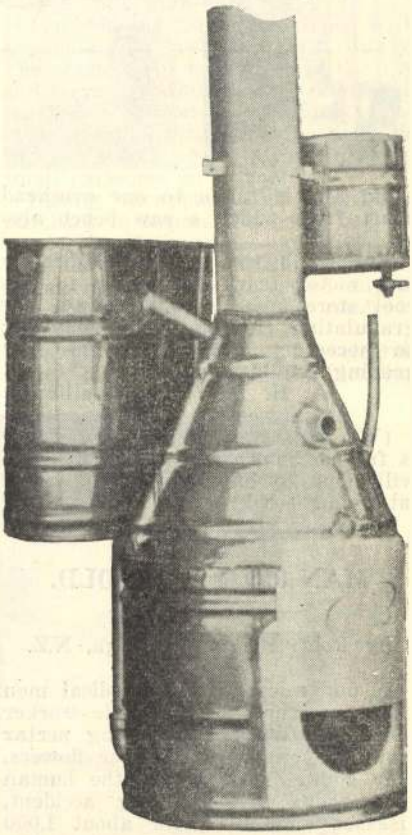
The most up-to-date Boiling Unit ever made. Will boil in 15 minutes from cold, using oil and wood, or wood only, supplying 80 gallons per hour from a 20 gallon storage. Built of heavy copper, heavily tinned, solid brass fittings, ¾ ball valve and one-inch heavy brass tap. Economical, easy to use, fired at the bottom and easily cleaned, plus a very generous supply of water.

Boiling water can be drawn off Steamwell continuously providing the fire is kept burning. It can be installed in wash-house or on convenient verandah, thus supplying the whole household with boiling water at very little cost. 14-gallon storage.

PRICE £14-10-0



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INTERNAL MARKETING DIVISION
(HONEY SECTION)

EXECUTIVE MEETING DEFERRED.

Owing to illness, the Minister of Marketing, the Hon. B. Roberts, recently informed the General Secretary that he now regretted that it would not be possible for him to discuss with the General Executive, as promised, matters arising out of the last Conference.

Following upon receipt of this advice, the General Secretary wrote to the Director of the Internal Marketing Division as follows:—

Foxton, 25th October, 1946.

The Director,
Internal Marketing Division,
Wellington.

Dear Sir,—Shortly after our annual Conference in Auckland in July last, the Minister, in acknowledging receipt of the text of the various resolutions passed, intimated that he would be pleased to meet the Executive of this Association to discuss the several points raised.

The Hon. Mr. Roberts has now advised me that owing to the state of his health he regrets that it will not be possible for him to fulfil his previous promise.

The Minister suggests, however, that we should discuss the points in question with you, and while we would be happy to do this, it would appear that in view of the fact that a new Minister will shortly be appointed, the present time would be inopportune for such a meeting.

Having in mind the expense involved in calling a meeting of the Executive, I feel that the proposed discussions should be delayed until after the Election. I imagine that this would be preferable also from your point of view, but if you feel otherwise, please let me know as soon as possible.

The question of increased prices is still a burning one in the Industry, and the position has been further aggravated by the increase in wages, cost of tins, etc.

So far as Stabilisation is concerned, the Industry is in a very difficult position and it is practically impossible to furnish an overall statement of costs for the Dominion, as there are so many varying factors affecting production and costs in each District.

In the primary production group, bee farmers appear to be the only section to whom increased prices have not been made available to meet increased costs since the pre-war period.

This Association earnestly trusts that the difficulties of the position affecting the Industry will be realised and that some means will be found of granting relief to bee farmers in common with other primary producers.

Yours faithfully,

(Signed) G. V. FRASER,
General Secretary.

To the above letter the Director of the Internal Marketing Division has replied as follows:—

Wellington, 30th October, 1946.

The General Secretary,
National Beekeepers Assn. of N.Z. Inc.,
Foxton.

Dear Sir,—I am in receipt of your letter of the 25th October in which you set out your considered opinion regarding any immediate approach to the Government on the question of the price of honey and other relative matters.

I must agree that the combination of the present election campaign and the absence of a Minister of Marketing would scarcely justify the expenditure and time you would need to put in at the moment. Therefore, I think your suggestion of postponing the

matter until after the election is quite a sound one.

Yours faithfully,

(Signed) R. P. FRASER,
Director.

MINUTES OF COMMITTEE MEETING, HONEY SUPPLIERS' ASSOCIATION.

Held in INTERNAL MARKETING DIVISION'S OFFICE, WELLINGTON, ON TUESDAY, 5th NOVEMBER, 1946.

Present: Messrs. F. D. Holt, J. R. Barber, E. R. Clark, R. H. Hobbs, T. E. Pearson, W. T. Herron.

Mr. T. Pearson moved—seconded by Mr. R. H. Hobbs, "That Mr. F. D. Holt be appointed Chairman."—Carried.

Mr. R. Clark moved—seconded by Mr. R. H. Hobbs, "That Mr. J. R. Barber continue to act as Secretary."—Carried.

Mr. Clark moved—seconded by Mr. Heron, "That we open an account with the Bank of New Zealand, Auckland, and that the President and Secretary be authorised to operate that account."—Carried.

Mr. Clark moved—seconded by Mr. Pearson, "That while believing that it is necessary at all times to have ample reserves behind the operations of the Honey Section of the Internal Marketing Division, in view of the fact that these have now been accumulated, we press for the right to have every season's seals levy paid out on that current year's supply at 7d. per lb. pro rata, plus a bonus, pro rata, up to 3½d. per lb. according to amount of honey received and Seal Levy paid in."—Carried unanimously.

Mr. W. T. Herron wished to record his objection to the plan operating in the past season, and spoke strongly in support of the payment of the reserves accumulated over the past years. His amendment—"That all Reserves be paid out to producers over past years, proportionately, over the years it had accrued, according to grade."—Lapsed for want of a seconder.

It was decided that Mr. T. Pearson and Mr. J. R. Barber should be a subcommittee to further the matter with the Stabilisation Committee.

Mr. Herron moved—seconded by Mr. Holt, "That it be a recommendation to the annual meeting that qualification for membership of the Committee be reduced to six tons supply over three years."—Carried.

Mr. W. T. Herron moved—seconded Mr. T. E. Pearson, "That an annual balance sheet be tabled to the Committee."—Carried.

Mr. Pearson moved—seconded Mr. Herron, "That beekeepers be requested to supply a proportion of their crops to the Internal Marketing Division, recognising the need for its continued operation in view of the possibility of the cessation of sugar rationing."—Carried.

Mr. Herron moved—seconded Mr. Pearson, "That in view of the growing desire among producers to have the business formed into a semi-proprietary organisation in conjunction with the Internal Marketing Division, we request all producers to forward as much honey as is available in order to establish a sound basis for such an organisation."—Carried.

Mr. Herron moved—seconded Mr. Hobbs, "That the Chairman and Secretary be reimbursed for expenditure incurred in preliminary organisation of Honey Suppliers' Association, and travelling expenses for this meeting, be paid."—Carried.

Mr. Clark moved—seconded Mr. J. R. Barber, "That every year two members retire from the North Island and one from the South, and that they be eligible for re-election."—Carried.

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DEPARTMENT OF AGRICULTURE
HORTICULTURE DIVISION

The past winter was comparatively mild in most parts of New Zealand; consequently brood-rearing was continued last autumn much later than usual, resulting in a heavy consumption of honey stores and the necessity for much artificial feeding in some localities.

In the AUCKLAND district cold winds and almost constant wet weather from August to the end of October prevented the normal activity of the bees, and considerably weakened the vitality and strength of the colonies in some areas. Rearing of queens on a large scale has been difficult, and the percentage of successful matings has been disappointing. Production of honey from tea tree in coastal areas has been fairly good, but in inland districts little or no honey has been produced to the end of October from this source. Seasonal conditions generally were similar to last year at this time, but pastures are more backward.

HAMILTON DISTRICT: Weather conditions were similar to Auckland, consequently the bees were unable to work the willows and barberry to any extent this season. Artificial feeding has been heavy and the bees generally are backward.

PALMERSTON NORTH: Colonies came through the winter period reasonably well. The wet spring has kept them inside the hives most of the time, consequently there has been less wastage of field bees this spring. Honey stores have been used rapidly and artificial feeding has been necessary in most localities.

HASTINGS: Weather conditions generally in some areas of Hawkes Bay have been fairly good at critical periods, enabling the bees to work willows from which upwards of one super of surplus honey per hive was stored in parts of the district.

CHRISTCHURCH: The bees were able to break their winter cluster much earlier than usual, due to mild weather conditions, and where brood-rearing was started earlier this season, honey stores on the hives were almost depleted by the end of September. Early September was warm with strong north-west winds, but winter conditions developed later and persisted until the end of the month, preventing the bees working the willows. Recent heavy rains, however, have thoroughly soaked the earth, which will ensure clover growth over a long period in warmer months.

INVERCARGILL: Colonies opened up fairly strong this spring with minimum winter losses. The weather has been broken throughout the spring, with frosts, snow, and much rain. All spring flora has been backward and very little nectar was gathered from early sources. At the time of writing the soil is wet and cold, and pastures are somewhat backward. The shortness of the pastures will, however, favour a quick growth of clover when soil temperatures increase. Colonies generally are now in good average condition, and with reasonable care in the matter of feeding should be ready in time for the main honey flow.

No reports are to hand from Westland districts.

W. K. DALLAS,
Director of the Horticulture Division.

REHABILITATION BEGINS WITH SOMEWHERE TO LIVE. IF YOU ARE SELLING YOUR BEEKEEPING BUSINESS, SELL TO A SERVICEMAN.

N.Z. HONEY CONTROL BOARD

CHAIRMAN'S REPORT.

Of the many matters brought forward for discussion at the annual Beekeepers' Conference, that of arsenic spray poisoning by fruitgrowers in Hawkes Bay was the most serious.

Beekeepers in that area were virtually faced with the necessity of leaving the district unless some protective measures were taken to ensure reasonable security against a repetition of their experience of the previous season. Fortunately the fruitgrowers in the area concerned were fully alive to the consequences to their industry should beekeepers be forced to leave fruit-growing areas. Everyone concerned will be glad to know that both beekeepers and fruitgrowers reached a mutually satisfactory solution to the problem. This, however, involved the passing of certain legislation, the principal feature of which was the control over the period of spraying by the orchardist. At the request of the beekeepers concerned the Board drafted out a report on the subject to the Minister, with a strong recommendation that the legislation as requested be immediately introduced.

Beekeepers will be happy to know that the Apiaries' Act was amended in the final week of the last Parliamentary session to provide for the application of the proposals put forward on behalf of the beekeepers. In this connection Mr. Dallas and his officers were most helpful, and what is hoped will prove a satisfactory solution to a very serious problem was in no small measure due to their efforts.

Appointment of Additional Apiary Instructors.

The Industry will welcome the recent official statement that authority had been granted for the appointment of three additional full-time apiary instructors. It is nearly twenty years since any addition was made to the existing staff and since then the total number of hives in the Dominion has nearly doubled. Moreover the duties of Instructors have greatly increased during that period. Some six months ago the Board interviewed the Minister on this subject and directed attention to the necessity for permanent instructors in addition to the seasonal part-time men.

The I.M.D. Pay-out.

The matter of obtaining an improved pay-out for the I.M.D. honey suppliers has not been overlooked by the Board, and we have reason to be hopeful of obtaining official recognition of the unfair returns to suppliers as compared with that of non-suppliers. Acting in co-operation with the I.M.D. Honey Suppliers' Committee a proposal is in course of being submitted to the Government which, if accepted, will appreciably improve the position of the suppliers to the Honey Division. Suppliers will be advised in due course the result of the efforts being made on their behalf.

WALLACE, NELSON,

Chairman, Honey Control Board.

At a recent meeting of the combined Entomological Societies of America in California a joint paper was presented by the American Association of Economic Entomologists and University of Minnesota by M. H. Haydak, University of Minnesota, in which he says:

"Honey, due to its iron and copper content, was found to be helpful in the formation of hemoglobin, the red pigment of blood cells. Honey was also found to contain vitamin B1 (thiamine), B2 (riboflavine), B6 (pyridexine), C (absorbic acid), nicotine acid, and pantothenic acid in variable amounts."

This statement has been made many times but Dr. Haydak's paper is the first authoritative publication to contain the information given.

CONTENTS.

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