The Australian bee bulletin. Vol. 15, no. 4 July 28, 1906

West Maitland, N.S.W.: E. Tipper, July 28, 1906

Registered at the General Post Office Sydney for transmission by post as a Newspaper

THE AUSTRALIAN Bee Bulletin.

A MONTHLY JOURNAL, DEVOTED TO BEE-KEEPING.
Edited and Published by E. TIPPER, West Maitland; Apiary, Willow Tree, N.S.W
Circulated in all the Australian Colonies, New Zealand, & Cape of Good Hope.

VOL. 15. No 4 JULY 28, 1906. PER COPY, 6D
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Devoted to Beekeeping —

Circulated throughout the Commonwealth of Australia — New Zealand & Cape of Good Hope

EDITOR & PUBLISHER. WEST MAITLAND & WILLOW TREE.

MAITLAND, N.S.W.—JULY, 1906.

Handle bees quietly and leisurely.

Cleats are preferred to hand holes in hives.

The size of the British standard frame is 14in x 8½in.

Keep your entrances small till the warm weather starts.

Get your queens' wings clipped before the colony gets too strong.

Up to February 27th no rain had fallen in the Argentine for two months.

Get your queens clipped early in spring, before the hives get too populous.

Italian bees introduced into the Transvaal are said to be an unqualified success.

Colonies with side entrances are said to be liable to die out in spring.

The best way to get honey out of cappings is to let them stand for several days until they can drain dry.

When feeding bees robbers may be discouraged by thinning the syrup to only sweetened water.

In nine cases out of ten queenless lots in spring are best added on to the neighbonring hive.

The giving of a young queen before the swarming fever has developed will prevent swarming.

A. Olmstead, in the "Beekeepers' Review," recommeds in introducing a young queen, to clip the old queen's sting.

With ruberoid or similar material on top of frames under cover, the evils of leaky covers are materially minimised.

A beekeeper in Port Elizabeth, South Africa, says he always gets 1s. 3d. for a 1-lb. section. There is a duty of 2d a lb. on honey going into South Africa.

Mr. H. L. Jones, of Goodna, Queensland, the well-known supply-dealer and queen-raiser, writes us there is a splendid honey season promised in Queensland.

A Frenchman fed his bees with a slight addition of vinegar in the feed to prevent candying of the honey. Result, great mortality among the bees.

The Port Elizabeth (South Africa) Agricultural Society has ordered a bee tent and complete outfit for honey display at shows from England.

A weak colony with a queen may be profitably placed above a strong colony with its queen, by placing a queen-excluder between.

A frame of sealed honey or sugar syrup may be fed to a colony short of stores in spring, by placing it beside, not in, the brood-nest.

A writer in the "British Bee Journal" says paint for hives should be free from turpentine. Another says, in cooling wax, if the mould is rubbed with glycerine the wax will not crack.

The "Irish Bee Journal" complains of 'rubbishy' foundation being sold in Ireland. In Galway foundation which the bees refused was sold at the modest price of 3s. 3d. per lb.

Mr. E T. Penglase, whose advertisement is on another page, says:—During the past fourteen years I have imported Cyprian, Golden, and Red Clove Queens. The result is, I have developed a strain of Bright Yellow Queens and Bees retaining the four best qualities, viz., Gentleness, Length of Tongue, Freedom from Disease, and Excellence as Honey Gatherers.

We acknowledge receipt of "Shilch's Messenger of Wisdom," a publication printed in Michigan, U.S.A. It is a publication dealing with Bible Prophecies and the coming of the end of the world. Well got up.

As many of our friends send us reports of their apiaries from time to time it is only right we should have our say about our own. This time twelve months we had 200 swarms of bees. Now there are scarcely 60. We hope we will not get another such a spring. We removed some 12 miles away in order to go into dairying, which, like beekeeping, was a boomed industry. Yes, we saw it everywhere displayed that a good cow was worth £1 per month. We now find it may be so for one or two months in spring, but not for the rest of the year. The 60 hives of bees we have left 12 miles away requires looking after. Hard hills, bad roads. We paid a visit to them last week, but it turned out a cold blustery day. So, beyond seeing that all covers were on properly we let them alone. Our next visit will be in a month or so's time, when if the weather is warmer will go through them, clipping queens that may require such, and seeing they have food sufficient. We only anticipate one flow this season, that is yellow box in November and December. The apple bloomed last year, so we anticipate a poor flow from that at beginning of new year, and next winter will need feeding, or yellow box honey left in to get them through. Neighbours a few miles from where we are are putting in a white box flow, but this is not so with us.

LUCAS v. PETTIT.

A great deal of interest was taken in the Lucas-Pettit case which was tried lately at the assizes at Simcoe. The action was brought by Freeman Lucas, a farmer of Nixon, near Simcoe, against Morley

Petitt, a bee-keeper, for 2000 dol. damages for the loss of a span of horses and for injuries to the plaintiff by a swarm of bees. Last summer the plaintiff's horses were stung to death one day while the farmer was engaged in cutting oats. The bees swooped down on the horses in such force that they put the animals out of business in a few minutes, and killed them in about an hour. Mr. Lucas fled for his life to a mud puddle near by, and it was only by getting right into the mud hole that he escaped meeting the same fate as the horses.

The plaintiff alleged that the bees which did the damage belonged to the defendant who had 160 hives of honey bees on a property across the road from the scene of the trouble. The defendant denied liability. The jury gave a verdict for Plaintiff Lucas for 400 dol.—*American Beekeeper.*

VICTORIAN APIARISTS' ASSOCIATION.

In reference to our complaint of February 2nd. as to the use of Glucose, addressed to the Tariff Commission, I submit below copies of further correspondence.

Commonwealth of Australia,
Royal Commission on the Tariff,
Customs House, Melbourne,
16th June, 1906.

Sir,—Adverting to your letter of complaint concerning the operations of the Commonwealth Tariff, I have the honor to inform you that the Commission will resume its Melbourne Sittings on Tuesday, the 19th instant, at Parliament House, Melbourne.

Should you desire to tender sworn evidence in connection with the subject matter of your correspondence, it would be esteemed a great favor if you would be so good as to furnish me at once with a full statement of particulars, and, if practicable, 9 copies of same; otherwise, please reply immediately informing me that it is not your intention to appear.

The actual date and time of hearing will be advised later. In the meantime kindly hold yourself in readiness to be available at short notice.

It is necessary to add that no expenses are allowed except in the case of witnesses directly summoned by the Chairman.

I have the honour to be, sir,
Yours etc.
O. T. ORR,
Secretary

To R. Beuhne,, Esq.,
President,
Victorian Apiarists' Association.

Tooboorac, 18th June, 1906

To The Secretary,
Royal Commission on the
Commonwealth Tariff,
Customs House, Melbourne.

Sir,—In reply to your letter of 16th instant, I beg to inform you that it is not our intention to appear to give evidence, on account of being unable to procure evidence such as would prove to the Commission the decline in prices and in sales of lower grade honey to be due to the substitution of Glucose for Honey.

We recognise that only the Royal Commission by examining witnesses from the industries concerned, viz., Tobacco and Confectionery, could obtain reliable information as to the extent to which Glucose has replaced honey.

We understand that Glucose for the manufacture of Tobacco is imported duty-free, and it is against this free importation we desire particularly to protest.

Very respectfully yours,
R. BEUHNE,
President, V. A. A.

APPLICATION FOR PROCLAMATION OF BEE RANGE AREAS.

The Hon. The Minister of Lands,
Lands Department,
Melbourne.

RE BLUE BLOCKS, HORSHAM.

Dear Sir,—The Executive Council of this Association respectfully requests that the Blue Block country may be proclaimed a Bee Range Area under Section 9 of the Land Act 1905.

There is indisputable evidence of the great value of this class of country for honey production in addition to its value for commercial timber. There are at present many who have gone into honey production in the Blue Block country who would be forced to abandon the industry should the timber at any time be destroyed, with great loss to themselves and loss to the state. Our industry is, however, as yet in its infancy, and will with modern methods expand rapidly if the permanency of the natural honey resources of this State is secured by the reservation of all

suitable country for Bee Keeping and timber purposes.

We would also point out that permission to destroy the timber will not increase settlement, but merely slightly benefit present holders and at the same time destroy a national asset which cannot be replaced, severely injure the Beekeeping Industry as existing at present, and arrest its expansion under the provisions of the Land Act 1905.

This Association receives many inquiries for Honey country, some even from adjoining States, but until there is some measurable security of permanency of Bee Pasture we do not feel justified to recommend any one district or locality, and are therefore unable to carry out one of our principal objects as an Association.

We have no doubt that the reasons which actuated the Government to pass legislation for the furtherance and regulation of the Bee-keeping Industry, will also prevail in seeing that this legislation has a fair chance to attain its objects. If the output of Honey producers in this district be taken into account it will be seen that our request for this "Proclamation" is a most worthy one, based as it is upon facts in Honey production that are indisputable evidence, as to the commercial value to the State, that this district may yet become under fair treatment as regards Apiculture.

We remain, Sir,
Respectfully yours,
R. BEUHNE, President,
W. L. DAVEY, Secretary.
Victorian Apiarists Association.

The Minister for Lands (Mr. Murray), was interviewed by a deputation of lease-holders of land under the grazing area from the noted "Blue Blocks" district, near Horsham, on the 4th inst, at the Treasury buildings, Melbourne. Apiarists need not be reminded that their interests have in the past been somewhat concerned in the "Blue Blocks," and representatives of the beekeeping industry were also invited to be present by invitation of the Minister to hear any requests made by the deputationists. There was an equal representation on both sides as they mustered in the Minister's room.

Mr. Thomson, M. L. A., in introducing the deputation of leaseholders, said that he wished that no unjustice should be done to the bee-farmers, There was no reason he knew of that grazing, adopted by the lessees, should not be carried on simultaneously and harmoniously with the bee-farmers. The two industries should, in his opinion be carried out without hindrance, but the point of contention was that the leaseholders wished to carry out a certain amount of ring-barking of trees, and consequently objection was taken to this course by the bee-farmers, who felt that by destroying the trees they were deprived of a certain profit that would otherwise be obtained from bees collecting honey from the blossoms. It seemed to be a very contentious point, as the leaseholders urged and he believed, that many bee-farmers agreed that a certain amount of ring-barking was beneficial to both parties. For instance, the bee-farmers did not object to the ring-barking of useless timber and trees which did not bear blossoms.

Mr. H. Jackman, on behalf of the leaseholders, presented a petition signed by some thirty lessees, explaining at length their grievances. They desired permission to ringbark all "useless" timbers. The provisions of the Bee Bill should not be enforced against them, otherwise they could not become permanent settlers. They desired to cultivate the land for fodder for their live stock. Further, it was requested that an independent board should be appointed to supervise their holdings rather than inspection under the present system. It was stoutly denied that the ring-barking already done had deprived the bees of their food. Only useless timber from a bee-keepers point of view had been destroyed. The opinion of many of the holders of these blocks was that after thinning out the useless timber the remaining trees produced more blossoms. (Ironical laughter from the beekeepers.)

Mr. Zerbst, on behalf of the leaseholders, said that they took up the land under the distinct understanding that they would have the right to select it.

Mr. Murray: I don't know where you got that idea from.

Mr. Zerbst: The question was asked by the land board, and every applicant was given to understand that he would have the privllege of "selecting" it.

Mr. Murray said that he was at a loss to know how such a misunderstanding could have arisen. The records of the department, including the debates in Parliament, failed to show it. The land had been simply gazetted under grazing area leases. (The records were produced, and Mr. Murray, after a lengthy search, assisted by his secretary, failed to discover any trace of evidence in support of the statement made by Mr. Zerbst on behalf of the deputation).

Mr. Murray said that he was firmly convinced that the land was only granted under a license fee.

Mr. Zerbst (continuing): Between the local bailiffs and the holders, the latter did not know what to do. One bailiff consented to one thing, and another to another thing.

Mr. Murray: I know; and immediately his back is no sooner turned than you carry on the destruction of timber in the most ruthless fashion, and simply get the permit to do it without regard to ringing "useless" timber.

Mr. Zerbst: There is a clause in the Bee Act we object to in regard to dual occupation.

Mr. Murray: Well I suppose you must obey the law (Laughter). The bees can take care of themselves although I heard of a man who was going to shoot them. (Laughter).

Mr. Zerbst: If we want to keep bees we must take out a license.

Mr. Murray: That is correct, because the land was obtained at a very low rental.

Mr. W. L. Davey, representing the Victorian Apiarists' Association, said that they wished that no injustice should be done to the settlers on these blocks as long as the ring-barking of the trees indiscriminately was discontinued. When this land was thrown open for settlement there was a distinct understanding on the part of the Government that no ring-barking of trees would be permitted. (Hear, Hear). Grazing rights to the land would be given, but there was a special provision that the destruction of the timber which furnished food for bees when in blossom, would not be allowed. He wished to state that honey production in this state was not now a small matter.

Mr. Murray: You fellows I hear are making a lot of money. (Laughter).

Mr. Davey (continuing): Well, no. (Laughter). The question was, who was going to decide which was "useless" timber. He was quite satisfied that there was more profit to the State in the beekeeping industry and preserving the timber than leased under grazing or cultivation. In three years he knew of a man who gathered 66,000 lbs. of honey from about 150 colonies of bees. The deputation on behalf of the graziers had urged that they desired to improve the grass. This could only be done by ring-barking the trees. He would like to ask what would then be the comparative value of land fram a beekeeping point of view compared with grazing. It was an undisputed fact that the ring-barking of trees would not assist the production of honey. He was confident that the Minister, when conversant with the facts, would not permit the bee industry to be ruined, if the requests of the deputation were acceded to. (Hear, hear).

Mr. L. T. Chambers said they intend to stand up for a principle the justice of which would be readily acknowledged. It was the duty of the State to protect every section of the community, and offer encouragement in the direction of making two blades of grass grow where only one formerly existed. In doing so it was equally important that two families should be brought up where only one lived. This fact should not be lost sight of when inducing people to live on the land instead of dwelling in congested centres of population. He knew of many instances where men had left the cities and taken up bee-farming with marked success, and reared their families under the most healthy surroundings. This statement could be endorsed by the Rev. Canon Tucker, who had become greatly interested in the industry from assistance lent by him to a man who commenced bee-farming in the most humble way. This man had become so successful that he subsequently bought a large agricultural area. Asked how he succeeded, and he replied, "What I have done can be accomplished by others. There is room for hundreds to do the same thing." To put two families on the land where only one previously lived should not be overlooked by the State, and every encouragement given to those desirous to follow bee-farming as their means of existence. This would mean an additional source of revenue to the State.

Mr. H. H. Davey said that the conservation of the timber resources of this State was a very important one. Allow the principle of wholesale devastation and destruction to be carried on and the whole state would soon become a wilderness. He was deeply impressed with the fact while travelling through different parts of the State to notice the want of cultivation of suitable trees for shelter for stock. To permit the cutting out of even "useless" timber involved a principle which they did not know where it would end at the "Blue Blocks." Apart from the very important fact that the trees furnished food for bees, the timber being destroyed was of some commercial value. By destroying the timber they destroyed a source of profit for all time from a beekeeping point of view. There were miles and miles of country, especially in the Wimmera district, where not a tree could be seen to afford shelter to either man or beast. Owing to the absence of shelter during winter the mortality among stock was very great, and it was surprising that more attention was not given to tree planting. The wholesale destruction of timber should not be permitted.

Mr. Barnes also spoke on behalf of the beekeepers, and quoted statistics to show the importance of the industry.

Mr. Murray: Ah, I see you know something about bees. How many hours a day did the bees work to produce the amount of honey stated (Laughter). I suppose they don't come under the Factories Act. (Loud Laughter). Now tell me if honey from the blossom of a stunted tree was as good as that gathered from a sound tree. Laughter.)

Mr. Barnes: Oh, yes. Of course some trees were productive of more honey than others. He mentioned the trees more suitable than others.

Mr. Cook, Conservator of Forests, at the invitation of Mr. Murray, stated his view of the question. He had spent several days visiting the "Blue Blocks," and was astounded at the wholesale destruction of timber that had been most ruthlessly carried out. Splendid specimens of valuable timber had been destroyed with disregard to the conditions under which permits to cut timber had been granted.

Mr. Murray, to the deputationists: Do you hear that?

Mr. Cook: The work of destruction had been carried out indiscriminately, and proved very disheartening to him to have witnessed it. Splendid trees standing a great distance apart had been singled out for destruction. It was not done with the intention of thinning out the timber, but was simply a disgraceful piece of vandalism. It simply staggered him.

Mr. Murray, addressing the deputation of lessees, said that there was no record of any corroborative evidence that they were entitled to select this land. This land was held by them under a special tenure, and the debates in Parliament clearly supported this view. He could not recognise that there had been an understanding that they would have the right to select this land. There was nothing to show that their claim in this direction could be acknowledged. He disliked dealing with one under a misapprehension, but in this instance their claim for the right of selection would fall to the ground. When they were given the occupancy of this land it was specifically provided that timber from a commercial point of view and suitable as food for bees should be preserved. He was, however, quite satisfied that bee-farming was a more substantial industry than any other use this land could be put to. (Hear, hear). By destroying the timber they would be actually destroying the only crop that was available for the support of the beekeeping industry. The lessees were not paying a rental for the land in proportion to the profit derived from beekeeping. There was no reason he knew of why beekeeping and grazing could not go hand in hand. It, however, appeared to him that every permit given to ring-bark timber had been abused by men who had no regard for the rights of others. It was recognised in the Act that bee-keepers should get protection, and he intended to see that it was carried out. It had been urged that ring-barking had been done with a view to improve the grass, but it seemed that it could not trust these lessees with permission to do so. Not one tree, in his opinion, useful for beekeeping should be destroyed. He intended to ask the officer of his department to furnish him with further reports on the subject.

Mr. Cook, promised to furnish a report in detail to supplement his verbal statements.

Mr. Murray, continuing, said that he did not know how the lessees could fall into the mistake that they had the right to select the land.

Mr. Thomson, M.L.A., said that he wished to be fair to both sides. He wished to know if the beekeepers objected to cutting down bull and sheoak.

Mr. W. L. Davey said that bees derived a certain amount of pollen from the sheoak, but no serious objection he thought would be raised by beekeepers to its destruction provided the leaseholders could be taught that Bulloak bark did not grow on Red Gum trees. (Laughter).

Mr. Murray concluded by stating that no tree that furnished food for bees for the production of honey should be destroyed.

Mr. W. L. Davey, on behalf of the beekeepers, thanked Mr. Murray for his favorable reply, which had been regarded by them as "fair play."

Mr. Murray (humorously): I don't know about fair play, because the other fellow might think it was very unfair play." (Laughter.)

GLUCOSE AND THE FEDERAL TARIFF.

Mr. Beuhne, President of the Victorian Apiarists' Association, having laid this matter before the Tariff Commissioners of the Commonwealth, has received the following from the Secretary of same:—

Commonwealth of Australia,
Royal Commission on the
Commonwealth Tariff,
Parliament House,
Melbourne, 5th July, 1906.

Sir,—In further reference to your letter of 18th inst., and my reply of 22nd, I have now the honor, by direction of the Chairman, to renew the opportunity for yourself or a representative witness at Melbourne to tender evidence.

In any event, I am to inform you that the views of your Association will not be overlooked.

I have the honor to be, Sir,
O. T. ORR, Secretary.

R. Beuhne, Esq.
President,
Victorian Apiarists' Association.

It will be well for any beekeeper who can give suitable evidence in the subject to communicate at once with Mr. Beuhne, Toboorac, Victoria. Perhaps Mr. T. H. Bradley, who was the first to move in the matter, will do so.

The Gypsy and Brown-tail Moths.

Of course, all bee-keepers and everybody the country over, are interested in the fight which now for fifteen years has been carried on in Eastern Massachusetts against the gypsy-moth, and which is now being waged with more energy than ever before against this insect and the equally alarming brown-tail moth. The gypsy moth is an indiscriminate feeder, and so the great splendid parks and forests, and the so justly famed street-trees of New England, seem doomed unless man's interference puts a stop to the frightful destruction of these two insects. The brown tail does not feed so generally, but is mostly confined to rosagous plants like apple, pear, etc., and oak. It is white, though the abdomen is tipped with red or brown, and hence the name. The female of the gypsy-moth does not fly, while the brown-tail is strong on the wing, so this latter spreads more rapidly than the other; yet the caterpillar of the gypsy-moth, like canker-worms, has the habit of dropping by a web or silken thread which it spins at will. in the same way that spiders suspend; and, of course, a passing wagon or automobile catches them up, and may hurry them off for miles to drop them and their mischief in a new and distant center of invasion and ruin. To-day nearly 30,000 acres of parks and woodlands in Eastern Massachusetts are attacked, nearly half very seriously. Add to this the roadside trees, and we have a picture that may make us tremble. From 1890 to 1900 the great Bay State expended nearly a million dollars fighting the gypsy-moth She so lessened its ravages that effort ceased until 1904. Now the evil is twice extended, and worse than ever. "Putting the hand to the plough and looking back" was a costly mistake of our hubbite friends. The brown-tail has now reached about half the State, and has spread to Rhode Island, New Hampshire, and even Maine. As yet the gypsy-moth has reached only Eastern Massachusetts and a narrow border of New Hampshire and Rhode Island. Both these moths came from Europe, where they are held in check by parasites, so that only in occasional years do they work serious harm. As I have already explained in Gleanings, these parasites are being introduced here in the hope that the devastation may be stayed. In California we have a very effective quarantine, in expert hands, that we may keep such evils from entering our State.—*Professor Cook in Gleanings.*

PRICES OF HONEY.

Melbourne Australasian. — Honey — Prime honey is in moderate demand at 3d., choice extracted fetching 3½d. Cloudy, dark, and inferior is dull at 2d. to 2½d. Beeswax is quoted at 1/2 to 1/3.

Melbourne Leader. — Honey. — There is ready sale for prime clear garden lots, for which purchasers are paying 3d. to 3¼d., and occasionally 3½d for extra prime; medium to good is worth from 2½d to 2¾d. Beeswax.—Up to 1/3 is to be got for prime clear wax, which is scarce, medium and discoloured lots are obtainable at figures down to 1/-.

S. M. Herald.—Honey, 60lb tins, choice extracted 3d to 3½d, good 2½d, inferior 2d per lb. Beeswax—Dark 1/1½, prime 1/2.

Maitland Mercury.—Honey, 2d to 2½d. per lb. Small tins 2/3 to 2/6.

HONEY.—

Sales are very slow, buyers objecting to the high prices which have recently been ruling. Stocks are accumulating, and the top value today is 3½d for prime quality, medium and candied lines from 3d. per lb. We would advise senders to hold back consignments for a few weeks to enable us to clear present stocks.

BEESWAX.—

The market is very firm, with a good demand from 1/1 to 1/2, according to quality.

ANCIENT BEE KNOWLEDGE.

Continued from last issue.

INCREASING AND SWARMING OF BEES.

Many attempts have been made by several ingenious persons for the increase of Bees without the troublesom and hazardous way of Swarming, by giving them liberty in the Spring and Summer to swell their vast numbers into several Artificial Hives, the one set under, or by the other. But when they are dispersed into several Hives or Boxes, and near an equal proportion in each Box; yet when these Hives are separated with the Bees in them, that part separated from the old Stock will not thrive: A great Argument of their want of, and love unto their King or Queen, if they have any, which doubtless remains amongst his greatest Riches in the first Stock; from which if part of them voluntarily separate themselves by swarming with their Leader, they soon betake themselves to their work. So that I could never observe, from the Experience of any other, nor yet from my own, although often and seriously attempted, that the Stocks or Colonies of Bees could, by other ways or means than by their own voluntary Swarming, be ever multiplied or increased.

Therefore if you design many Stocks in your Apiary, or that you keep your ordinary Stock only for increase wherewith to store your better Hives (hereafter discoursed of) which you keep for the sake of the Honey, be sure not to over-hive your Bees; for the less the Hive is, the oftner they Swarm. For Bees over-hived rarely increase, unless it be an early Swarm and in a good Summer. And in good Summers an early Swarm not over-hived may cast a Swarm itself. A sufficient argument that they spend not their time in Luxury and Idleness; and that although they have room enough in their Hives to make their Combs and store themselves with Honey, yet do they breed during the breeding time, else could they not send forth a new Colony so soon; and cannot employ themselves in gathering Honey before it falls.

The sending forth of Swarms or Colonies doth not at all hinder or confound the Bees, it being but the work of two or three days to prepare for a Swarm; unless the badness of the Weather prevent, which may as well prevent them of working as of swarming. And after they are Hived, they, the very next day, fall to making of Combs if the Weather permit, and will in few days in fair Weather have made large Combs, and laid their Eggs or Seeds for another Breed. So that it cannot be reasonably imagined that Bees are in any confusion either before or after Swarming, or that they lose any time besides the day they swarm, as some have reported.

Bees usually swarm twice in a year, sometimes thrice, and though but seldom, four times in an extraordinary good year; so that there is no danger of a decay of your Stock, unless through your own neglect, but a certain hope and confidence of taking a Swarm every year from each Hive to supply your new Hives, (we are hereafter to treat of) without any diminution to your breeding Stock; and as may also be presumed, a store left for a future encrease, and those that are superannuated left for you into the bargain, so that care be always taken not to over-hive them.

But that which would most conduce to your advantage would be to cause them by some means or other to swarm, when they are in a condition fitting for that purpose. For every Bee-Master knows that an early swarm coming out when the Earth is clothed with wax-yielding Flowers for the building their Combs, and that the Bees have the whole, or at least the best part of the Honey-gathering season before them, is better than two or three after-Swarms, and better than the Stall whence it comes.

Also it is observed that many good Stalls, and well filled with Bees, are long ere they swarm; and sometimes lie out under and by the Doors of their Hives all the swarming season, there being no visible cause for such delay, which is a

great impediment to that improvement that might otherwise be made of these Insects, and much troubleth and discourageth the Bee-Master. Every one knowing that the principal advantage that yet was ever made by keeping Bees hath been in the multiplying them and their Colonies.

To obtain which many attempts have been made to provoke them to rise in fair weather, when they have abundantly laid out and hang'd under and by the Hive in great Clusters, by brushing them down and often disturb their quiet, which hath sometimes, although rarely, succeeded; others have taken off the Hackle in the heat of the day, and exposed them as much to the heat of the Sun as they could, which hath also sometimes proved effectual. When they hang in Bunches under the Door of the Hive, it is a good way to place a large Pewter Charger under them, so placing it with some props behind that it may incline to the Southwards, and by that means reflect the heat of the Sun on the Bees, which will make the place very warm, and if the Charger be polite, it may make the place too hot for them: In a day or two, by this means, they may Swarm.

But these ways are all too slender and uncertain to produce the desired effect; Therefore some way may probably be discovered to provoke them to swarm at such a time as the Bee-Master shall positively determine; That he may be said to command a Swarm, (the Store of Bees, and conveniency of the Season concurring). Which must be done, either by an invitation of them from their old home, as many other Creatures are usually allured, or drawn from one place to another by Stales, Baits, Calls, or such like policies: AsDucks by Dequoys, several other Birds by Calls, some by Baits, and Fish by light, &c. Or it must be by some facile enforcement from their Hives, by making their former place of abode uneasie to them. For bees will depart from their Hives if they like them not, although Combs have been built in them: And I have known Bees swarm when they have had much room in their Hives, and nothing openly appearing offensive to them. At Michaelmas I have had a small cast from a Hive where there was no apparent cause for their departure. Therefore may we again repeat—"Felix qui potuit rerum cognofeere caufas."

I only hint these things, that such that (out of their great love to these admirable Creatures) have been at so vast an expence and trouble in prosecuting that design of preventing the swarming of Bees and keeping them meerly for pleasure, without profit, as it (contrary to the promises of some) hath proved, (myself several years since having had a share in those disappointments) may afford a little time to try some experiments to multiply Swarms (instead of hindering them) which may be done without any considerable expence, and little more than observation: And without any charge of Bee-Houses or Licenses to use them, only Hives, Stools, and Hackles must be provided in case of Success. And I dare affirm that whoever shall first oblige this Nation with a true and publick discovery of this Art may be said to have done more to the advantage of Agriculture (if I may call this a branch of it) than any thing that has been done in it these many years. For in case the Bee-Master were but certain to have one Swarm out of each Hive in May, what a vast increase would he have in a few years? Although he should permit each swarm to stand but two swarming Seasons after he had hived them. And what a certainty would he be at in the prosperity of his Stock; it rarely happening that an early Swarm ever suffers, unless through their own age or the negligence of the Bee-Master.

OF THE BEE-HIVES OR HOUSES.

Before we did observe that some of the ancient Bee Masters had made Hives of transparent Matter, that they might the better discern the Work of the Bees, which it seems did not succeed according to expectation, else had they been more

frequently used and approved of by the Reporters of them. Butler also condemns the use of them to that intent. And most true it is, that you cannot through the clearest Glass discern their working, nor yet their Combs, unless in July or August about Noon, when most of the Bees are abroad, and their Company begin to wax thin by their killing their Drones and death of their old Bees, which now through their constant and extraordinary labour have worn out their wings, and fall far from home, uncapable of ever returning.

"For oft their Wings are torn on rocks abroad,
Freely spending their Lives beneath their Load;
In Flow'rs and making Honey such a pride
They have, by which their Lives away do glide."

Then may you discern the ends of their Combs filled with transparent nectar; but from that time they work not in making Combs, nor yet in breeding.

Some have been of Opinion that by the light of these transparent Hives these industrious Creatures do frame their Work with more expedition and delight. To which I may answer, That in the darkest Cells or Caves they shape their Combs as curiously and artificially as in the most lightsome; And that in these that are transparent, the numerous labourers do so much obscure their work that you would think the light of small advantage to them. Therefore Glass for that purpose is of no great use.

It is likewise supposed that Bees take much pleasure in the Light of these Hives, and so are thereby the more prompted to Industry. Whether that be so or not is difficult to determine.

But it is probable that an Hive made with large Squares of fine French or Dutch Glass, which is more transparent than the English, may not incommode the Bees; especially if each Glass window hath its Shutter over it, to close it from the cold as the weather requires it. This I am sure that it yields the Spectators much pleasure and delight to see these nimble Creatures always in Motion and full of business whilst the weather is hot, although not that expected and promised pleasure of the view of their Architecture.

Now if you design really to improve these Animals to their greatest height of advantage, you must observe their true inclinations, and follow them in that very Method that naturally they themselves tend unto. As

1. In what place soever they design to inhabit, they begin their work above and work downwards.

2. In a narrow Hive or place where their number is great, they are much impeded in their work; and in a broad Hive (so that their number be proportionable) they begin many Combs according to their number, and do not so much hinder the one the other.

3. In a tall Hive or other Cavity, when their Combs are of any considerable length, they become weary, because they continually ascend and descend in the narrow passages between the Combs, which is not only troublesome but a great hindrance to those that are below. For I have always observed that the uppermost part of the tallest Hives are never without Bees; but at the coldest time of the day or night, then very full, and at the hottest times they are continually ascending and descending. To prove which I once cut off, with a sharp knife, the top of a straw Hive aud some part of the Combs, thinking by that means that they would as well have passed out that way as at the bottom of the Hive; over which I placed a Glass Hive made after Mr. Hartlib's way, published in his Commonwealth of Bees, that in case the Bees would have always ascended, they might have then built in the new Hive over them: but they would not forsake their Combs.

4. The Bees always fix their work to the top of the Hives, and not to the Sticks only that are placed in the Hive, as by some is erroneously affirmed; those Sticks being placed in the Hives by some to strengthen them, that they should not sink with the weight of the Combs, by

others to preserve the Combs from breaking, in case the Hives should be leaned side-ways or removed.

5. They usually Swarm for want of Room.

6. A place cannot easily be overstock'd with Bees, so that they have liberty to fly without incommoding the one the other; but if the Country be barren or wanting of Meadow, Water and Oaks, it may be overstock'd.

(TO BE CONTINUED.)

NON-SWARMING.

We reprint the following conversation between two enthusiasts in the art of beekeeping, from *Gleanings*:—

"I have overcome the difficulty you seem to be in by putting on the sections quite early, so as to retard swarming as much as possible; then when the time for swarming came, set the hive from its stand and put an empty one in its place, having dummies in it to take the place of four of the frames, if the hive used is a ten-frame Langstroth, which is as small a hive as I should use if I were working on any of the plans which contemplated no increase in the apiary. Now set the super of sections from the old hive and look over the brood-combs, and all that you find that are not more than one-fourth full of brood, and all that do not have any brood in them, put in your new hive. In an ordinary season, and with the ordinary queen, you will find from two to four such combs; and these, together with the needed frames filled with worker foundation in wired frames, will make you six combs now in the hive, which, with the dummies, fill the same. Over this hive put a queen-excluder, and top of the excluder set the super of sections. If the sections are of the open top kind, put a sheet of enameled cloth over the whole top of the super, except a little place large enough to allow two or three bees to pass at a time, and this place should be in the centre of the end over the entrance to the hive. Having things thus fixed, shake the larger part of the bees off the combs remaining in the old hive, making sure that the queen is in the lower hive, when the frames of brood are to be arranged in the old hive, next one side, a bee-space apart, and a dummy or division-board drawn up next to them, when this hive of six or seven combs of brood, with the few adhering bees, is to be set on top of the enameled cloth and left for ten days."

"Don't you look for queen-cells, and only make colonies in this way that have cells started?"

"No. I can make the change almost as soon as I can look for the cells, and it makes no difference with the plan whether queen-cells are started or not. This going over all colonies once a week looking for queen-cells, as many advise, is an endless job. When you and the bees are ready, you just go right on and do the work, and you will find that such as have queen-cells started will do no better than those which have not. By going right ahead when you and the bees and the harvest are all ready, you have your swarming all done up at once, and you are ready to go at other work. If, in shaking, you find any queen-cells with larvæ in them, or those which are sealed, you will want to tear them off, else they may hatch before your next manipulation, and bother you in your work."

"What is the next operation or manipulation?"

"Ten days after making the colonies swarm, you will look over these combs of brood in the upper hive, and take off all queen-cells that you find on them. Some of the colonies will build cells and some will not; but it is best to be on the safe side, and look all over. It will not take long, and as the bees will be mostly below, all queen-cells will be easily seen."

"If I am right, that fixes the upper hive so the bees can not get any queen there, does it not?"

"Yes; and at this time you will want to see about the super room. If the sections are getting full, put another

super on top of them, raising the sheet of enameled cloth to the top of the super last put on. In this way all the young bees will emerge from these upper combs of brood will be run below, thus helping in the sections, while enough will stay at all times to care for the brood properly."

"Then you keep all the bees together in this way the same as I would by my plan?"

"Yes."

"Well, what next?"

"Keep on putting supers between the hives as needed till the end of 21 days from the time of making the swarms, when the dummies are to be taken from the lower hive, and that hive filled out with combs from the upper, when the bees are to be shaken from any remaining combs and the hive, and the same stored away for the next season's use, or the combs massed together on some hive worked for extracted honey, or for reserved combs of honey for feeeding the next spring."

"Is that all there is of it?"

"Yes—all but one thing; and that is, if there is any drone brood in any of the combs which go above the queen-excluder some means must be provided to get rid of them, otherwise they will clog the queen-excluder and die there. I generally do this by boring a half-inch hole at the bottom of the upper hive near the centre. In this way the most of the drones and workers which may chance to go out at this hole will find their way in at the entrance below. By using this plan you need make no increase, and yet obtain good results in section honey.—Doolittle.

HONEY IN SOUTH AFRICA.

Mr. Valder, the Government Commercial Agent for New South Wales in South Africa, reports that the Capetown market is not well supplied with first-class honey, the locally-produced honey being generally of inferior quality, put up in a very indifferent manner. The imported article is usually obtained in 1-lb. tins, and is also often of poor quality, and as the retail price for same ranges from 1/- to as much as 1/6 per lb., the sale is very small Mr. Valder sees no reason why a trade in good honey imported into South Africa has, during the past five years, varied from 40 up to as much as 80 tons per annum, arriving in about equal quantities through the Cape ports and Durban. The supply in the past has been at such high prices that it practically prohibited the people becoming honey-eaters; but, with a good supply at a reasonable price, they would no doubt soon become consumers on a large scale, and the imports would rapidly increase. In connection with the high retail price, it must be remembered that there is a duty of 2d per lb. on honey entering South African ports.—*Garden and Field.*

BEE-PARALYSIS.

As with the human being, so with birds, insects, animals, etc., the whole nervous structure is always inherited from the female line, and never from the male line. Hence, whatever imperfections of the nervous system may be found in the female parent is reproduced in a more or less degree in the offspring. Paralysis is an affection or breakdown of a portion of the nervous system, and except in very rare cases is there any possible cure for it, the cure or alleviation, if any, coming through strict attention to diet, and subjecting the paralysed limb to electric light rays. If we cannot cure paralysis in human beings, is it any wonder that we cannot cure bee-paralysis? The only cure (if it really can be called a cure—is to introduce a new queen into the colony, which will be tantamount to introducing a new nervous system (through young brood) into the hive.—*Exchange.*

A Waterproof Covering for Hives.

Procure from the drapers some thick buckram; this should cost 6d per yd., or perhaps somewhat less by the dozen. Give the hive roof a thick coat of what

coach-painters call 'smudge,' i.e., the contents of the receptacle for refuse paint. Stretch the buckram on the roof when the paint is wet, and tack all round. When quite dry give a good coating of smudge outside, and when this is dry and hard, a second coat, finishing off with two good coats of paint. This, with a coat of paint once a year, will last twenty or thirty years, at the cost named. Any coachbuilder will be glad to give the smudge for nothing.— *British Bee Journal.*

Natural Disinfectants in Colonies of Bees.

In Le Rucher Belge, M. Reidenbach propounds new ideas with respect to disinfection of hives. He says it is well known that bacteria are the cause of a great deal of mischief in hives, but these are in a measure protected from the depredations of these microbes by the formic acid, tartaric acid, and ethereal oils in the nectar. Formic acid, in small quantity, is found in the poison of bees, but exists in much larger quantities in the larvæ, and in combs that have been bred in. He was able to extract from a piece of comb weighing 41 grams about 36 milligrams of formic acid. He found none in virgin comb. He concludes that the object of this acid is to preserve the nitrogenous food of the larvæ, and consequently to prevent fermentation and resulting disease. Damp prevents the evaporation of this disinfectant, and predisposes colonies to disease; therefore, it is important to secure good ventilation, so as not to deprive the hive of its weapon against bacilli.

Another means of disinfection is in the tartaric acid found in the head-glands, which, for a long time, were supposed to contain acid. M. Reidenbach's research has shown this to be so, for formic acid is very volatile, and is rapidly dissipated in the air, but he found appreciable quantities of acid in the dry royal jelly several years old, which showed it to be not formic but tartaric acid. This not only inverts cane-sugar, but it is of greater importance in the food or larvæ as it changes by oxidation into formic acid.

A third means of disinfection is in the ethereal oils found in honey. It is these that produce the aroma that escapes from a hive during a rapid ingathering, or that attract the bees to the flowers, and give to plants like fennel, mint, and thyme, their healing virtues. Their action in a colony is inestimable, and they assist in preparing a healthy food, and, while arresting the development of bacilli, give vigor to the colony. And active and vigorous colony produces a large quantity of formic and tartaric acid, and with a rapid flow of nectar the ethereal oils increase, and the bees are in good condition to defend themselves against foul brood.

He concludes by advising the bee-keeper to look after the sanitary condition of his hives, to be sure that they have proper veniilation and good food; in fact, that they should be in a state always to produce the natural disinfectants to maintain the colony in a healthy condition. There would then be little to fear from foul brood.—*British Bee Journal.*

A Handful of Bees in the Fall.

In southwest Texas a more handful of bees in the fall, given a prolific young laying queen, and placed on full combs of honey in a hive, will give wonderful results the following season. They will winter safely, as they go into winter quarters with a lot of young bees. The usual fall honey-flows are splendid to stimulate these little "babies," and by winter they are in prosperous condition to come out next spring and breed up to strong colonies for the honey-flow. There is an abundance of nectar and pollen yielding flora throughout the early spring beginning in January; and when the flow comes in April these handfuls have turned into rousing colonies to roll in the surplus.

Having a young queen, there is little swarming; and the less a colony is inclined to swarm, the more honey it is likely to gather. The rearing of drones is also reduced to a minimum—an important factor also, as it is with old queens, an overproduction of drones means a lot of useless consumers and a drain upon the colony in that respect alone. Young queens will keep brood-rearing going until late in the season, putting the colonies in the best possible wintering condition. Late brood means a lot of young bees over winter to do their best in early spring when a strong force of such bees is worth as much as five times as many later in the season.

Old queens will cease laying at the cessation of the honey-flow. The colony winters with old bees which die off rapidly early next spring, and leave the colony weak at just the time when vigorous young bees are needed. In consequence of this fact, colonies with old queens drag behind all season, to be outstripped by the others. The bee-keeper can easily figure on which would yield the best results. In my experience, young vigorous queens of the previous season's rearing are what I want.—*Gleanings.*

Bees seize and hold a Village.

A great swarm of bees attacked, seized and held until late in the afternoon the village of Weston-on-Trent, England. An attempt to occupy some tenanted hives having failed, the defeated party made matters lively throughout the remainder of the day. The villagers were compelled to close their doors and windows, as the bees went for everything within reach. Six fowls were stung to death.

Died several years after being Stung.

Mrs. George Danner, wife of a prominent pump manufacturer of Allentown, Pa, and a bee-culturist, died suddenly at Hecktown, of blood-poisioning last week. Several years ago she went to the yard to pick some flowers, when a bee stung her on the wrist. Shortly afterwards her hand and arm swelled to enormous proportions, and she suffered great agony. Her case attracted the attention of medical experts from all over the country; but in spite of every recognized treatment, the swelling was only occasionally reduced, and finally the poison reached the heart, and death resulted. She was 53 years old and one of her sons, Norman, was a soldier in the Philippines, when he was seriously wounded.

DO BEES STORE WATER?

My apiary is about 120 yards from house and well. There is generally water running in a gulch up to about the middle of May. In order not to be bothered by the bees around the house and well I have trained them to two watering-places. It was then an easy matter to make my observations, which have been conducted, off and on, for the past seven months on rather hot and dry days, and also, later on, on damp and cool ones.

Provided with a small long-handled paint-brush and some white paint, I sat down near one of the drinking-places and put some little dabs of paint on sundry bees. After having thus spotted some twelve or fifteen bees I waited to see if those same bees would come back. In from five to twelve minutes, there they were with their paint. I have repeatedly tried this experiment on cool as well as on hot and dry days. Of course, the quantity of bees coming to the watering-place was much larger on dry and hot days than on cool and damp ones; yet I have seen them every day, even when the temperature was only 50, and snow clouds passed overhead.

Now, what have we to deduct from these observations?

1. That the *same* bees make repeated trips to the water.

2. That not *all* the flying bees come for water, but, as I have convinced myself, go to the fields. Have we to conclude that the bees that come for water are nurses, or especially chosen bees for this

water-carrying? I have noticed that a "guard" had, apparently, a "confab" with such water-carrier; but I can not be sure whether the guard got water from the river; neither have I been able to ascertain whether these water-carrying bees are only nurse-bees, but I incline to that belief.

I am much interested in this matter, and shall follow it up the coming season with one or two observatory hives. From what I have seen so far I feel confident that the bees carry the water in their honey-stomach into the hives; but, of course, I do not know they store it. Perhaps they use it for diluting the honey, etc., during the time when there is not enough nectar in flowers to be found. During the bloom of certain nectar-bearing flowers the number of bees at the drinking-places has decreased to an astonishing degree.—Dr. Boelte in *Gleanings*.

BAIT SECTIONS.

I have been censured for thus advising the use of bait-sections (without their having been cleaned the previous fall) the claim being made that if we do thus that the little honey left after extracting will granulate, and from this the "seed" for granulation will be left in the cells so that the honey in baits thus used will granulate much sooner than would be the case were the sections cleaned by the bees in the fall before the honey had a chance to granulate. But after years of careful observation and experimenting, I can only think my critics are mistaken, for such does not hold true with me. I am confident that the bees always clean all cells in which they deposit honey absolutely *clean* before they store any honey therein, and by their so doing all this supposed "seed" is removed so that there are no granulating "germs" left to start granulating. And, my experience says that the honey in such extracted sections does not granulate any quicker than that in any of the sections containing baits, cleaned by the bees in the fall, as is often recommended.—*Doolittle in American Bee Journal.*

AMERICAN CANDY.

Take good thick clover honey and heat (not boil) ir until it becomes thin; then stir in fine granulated sugar. After stirring in all the sugar the honey will absorb, take it out of the utensil in which it has been mixed and knead it in thoroughly with the hands. The kneading makes it more pliable and soft, so that it absorbs or takes up more sugar. The kneading operation, with the adding of fine sugar, should be continued till the dough is so stiff as to be quite hard to work. It should then be allowed to stand a day or two, and if at the end of that time it is so soft as to run or be sticky a little more sugar should be kneaded in. It should then be cut into cakes of convenient size and placed on the tops of frames in such a way that the bees can get at it easily. That known as "Good" candy for mailing queens is made in a way somewhat similar to above:—Take honey and fine icing sugar, and stir until it becomes a consistent dry paste. Add sugar until it turns to the proper consistency.—*Exchange.*

The fact that the average honey-yield from colonies of crossbreds is greater than that from colonies of the English bee makes the Italian bee very valuable for honey production in Britain. Were the pure Italian, and not the cross-bred, a greater honey-producer than the English bee, paradoxical though it may seem, a pure Italian queen would not be so valuable for honey-production in Britain as she is, because the beekeeper repays himself for her cost less from the honey produced during her life-time by the single colony headed by her than from the honey produced by the many colonies headed by her daughters and granddaughters, and these colonies, as we have noticed, consist of crossbreds.—*Exchange*

The Victorian Apiarists' Association.

(ESTABLISHED MAY, 1900)

ANNUAL CONFERENCE.

FEDERAL COFFEE PALACE.

FRIDAY, 31st August, 1906,

9.30 A.M.

PRESIDENT'S ADDRESS.
Secretary's Report. Treasurer's Report.
Correspondent's Report.

11.30 A.M.

Address by Dr. Cherry.—Pollen as a Food.
Bee Licenses and Bee Range Areas.

Adjournment for Lunch.

Classification of Land. Federal Department of Agriculture.
Queen Rearing (a new aspect)—R. BEUHNE.
Marketing of Honey. Foul Brood Treatment.
Managing an Apiary at Extracting Time.

SATURDAY, 1st September,

9.30 A.M.

Election of Officers. Date of Annual Conference.
Management of an Apiary at Swarming Time—W. L. DAVEY.
Adjustment of Rules.
Affiliation with Chamber of Agriculture—R. BEUHNE.
Importance of Pollen—R. BEUHNE.
The Association's methods and policy as regards the Export of Honey.
How to make Wax clean, clear, and attractive for market.
General Business.
Any Member may bring forward any matter or question.

To be continued MONDAY, SEPT. 3rd., and TUESDAY, SEPT. 4th, 1906, if necessary.

Apply for Cheap Railway Vouchers early to

W. L. DAVEY, Secretary,
FAIRFIELD, Victoria.

DADANT ON NON-SWARMING.

Connected with the prevention of swarming is the use of large hives, both in the brood-chamber and the supers. This has been our hobby for over 30 years, but is is a hobby which is well sustained by facts.

We began with comparatively small hives, mainly the 8-frame Quinby and the American. Then we began to manufacture 12-frame hives, for the purpose of trying side-storage, which by the way, was discarded. A friend of ours made some 16-frame Quinby hives, in which he had planned hiving three swarms each but his pet scheme was not practical and he failed and sold us the hives. We used them 10 or 12 years for single colonies.

Then we had an apiary in charge for several seasons, of about a hundred 10-frame Langstroth hives. We finally settled on a 9-frame Quinby hive with 2 division-board which was later framed to 10 frames, with one division-board. By trial, side by side, of large hives with wide supers, and small hives with narrow supers, we were convinced that the large hive was the better. Why? Because the large colonies filled their large supers just as quickly as the small colonies filled their small supers. Or, in other words, a colony having 10 frames and a dummy or division-board filled a super 16 inches wide as quickly as a colony with 8 frames filled a super covering the 8 frames, or 12 inches wide. Now, please bear in mind that this does *not* take place in *every instance*. But when we have good, prolific queens in our colonies, this will prove true in the majority of instances during good seasons. Our trials were not made on 8 or 10 hives of a kind, but on hundreds of each kind.

I see, in some European papers—I will not name them for fear of hurting some feelings—that experiments are conducted and conclusions reached *with 2 colonies*. Some of those experiments would give an entirely different result if they were conducted on from 20 to 50 colonies; and they would be still more conclusive if they were conducted in different apiaries located at spots giving a different crop.

I have stated that large hives give large crops. Now here is our explanation of the cause. "Many hives cannot hold one-quarter of the bees, comb and honey which, in a good season, may be found in large ones; while their owners wonder that they obtain so little profit from their bees. A good swarm of bees, put into a diminutive hive, may be compared to a powerful team of horses harnessed to a baby wagon, or a noble fall of water wasted in turning a petty water-wheel. As the harvest of honey is always in proportion to the number of bees in the hive and as a large colony requires no more labor from the apiarist than a small one, the hive should afford the queen sufficient space to deposit all the eggs which she is able to lay during 21 days—the average time for an egg to be transformed into a worker. Besides, it should contain a certain amount of food, honey and pollen."

The size of the hive must, therefore, be figured according to the ability of the queen to fill the cells with eggs. It was upon this that my father based the experiments which practice confirmed. He was not content with experimenting with Quinby and Langstroth hives of from 8 to 16 frames—he even tried hives with frames 18x18 inches, which, I will hasten to say, proved a complete failure. They were too large.

Although many leading apiarists disagree with us upon the question of large and small hives, they do not disagree upon the idea evolved. All those who have investigated agree that, in many instances, the queens can fill with eggs as large hives as we use, and that in those instances large hives are good; but they insist that the hive to be used must be small enough to accommodate only average queens, preferring to crowd the best queens rather than give too much room to the poorer ones. That is all the difference. We believe in placing our aim at the best, trying to achieve a result

allowing the development of the best, which in most cases secures the best, as we have proven to our heart's content, by constant success.—*American Bee Journal.*

CORRESPONDENCE.

E. J. C., Tarrawingee, Vic.—The past season throughout the North-Eastern District of Victoria was splendid. Every where around the bees did well. We also got a good market price for honey. Like many other districts the timber is getting ring-barked along the roadsides, as well as other places. In our Shire, the North Ovens, the green timber is protected. Any person caught cutting or ringing it is liable to a fine of £5. Any person informing on another will receive £5 reward for same. The trouble is in catching them. Despite every effort made to bring the offendors to justice, the ring-barking is still going on, and it will not be long before the green trees along the roadsides will be a thing of the past. How do you find Ruberoid to do on top of hive covers. Does paint injure it?

[We put the Ruberoid under the cover, top of frames.—ED.]

J. E. P., Guildford, Vic.—We have not had any returns for 4 years; just enough to keep the bees going. We got reduced to 3 or 4 hives, and have 9 now. It is no use taking what honey they have, that is in the bottom hive. What honey flow there was only lasted for a few weeks, to get the bottom hive well filled, and started on the top hive, and then the rain came and put an end to their busy time. Do you reckon we did right in doing so. A friend of mine told me that Mr. H. Atkin, of Newstead (only 7 miles from here), had a very good return from his bees, so you see what a difference only a few miles makes. And one of our neighbours who has several hives got very little honey.

[You did quite right. If the flow had ceased, I would have put the blanket top of bottom hive instead of top. At present time White Box is blooming some ten miles from my bees, but not at my place, although there is plenty of it.—ED.]

J. T. M., Lower Portland.—I'm sorry to tell you that the honey business for the past 3 or 4 seasons has been very unsatisfactory, but at the same time I am going to continue a subscriber to your little journal as long as I am able to work among the bees. The failure in the honey crop in this district is mostly caused through bush fires during the very hot, dry, windy weather. I have seen the fires destroy most of the young buds on the large trees of various kinds which grow on the mountains, and also the low scrubby bushes which produce a splendid quality of honey. Those fires are started by your neighbours, who very often laugh at the disappointed bee-keeper complaining about what destruction the fires cause. I have had many a hard tussel trying to stop bush fires, but at last had to give it up and allow them to go where they pleased. There are many obstacles which cross the path of a beekeeper, but I suppose it is of little use to complain. For the past few seasons I have made but very little from the apiary, but hope to give a brighter report next season. Wishing you every success with your A.B.B.

W. J. B., Tyndale, Clarence River.—The past season for bees in this district has been one of the poorest we ever had. The winter was a long cold and dry one. The westerly winds that prevailed during September until November played great destruction to bees. The first extracting I got was in January. However, the prospects for next season are very bright. We have had very little cold weather yet, and the hives are very strong, which means plenty of early swarming. Hoping that your prospects are equally as bright.

Mr. W. L. Davey writes us:—Our journal, the "Fruit World," as far as bees are concerned, supplies the gin case bee orchardist with aspirations to do better than in the past, and possibly improve his quality of honey, and put something on the market a little more stylish, instead of reducing values with badly got up stuff, etc.

H. L. J., Sheffield.—The seasons have been very poor over here lately on account of so much dry weather. There is a very poor sale for honey here when you do get it. The winters are so long that the bees require a large amount of the honey they gather to last them till spring comes. There are very few people keep bees round here. They mostly keep a box hive or two to get enough honey for their own use. Wishing you a prosperous year.

J. R. H., Narromine.—Last season I received no honey, and the season before I got only thirty tins of 60 lbs. each, and most of the bee-men have lost heavily. I have only twenty swarms left. If I do get a turn round I will write for paper again. The reason I took to bees was I am crippled with sciatica, but there is nothing in them. This spring dwindling is ruination to us here. The bee experts in the Dubbo district are the biggest losers. They say one man lost close on 100 swarms, and has given up altogether. The are no wild bees (so-called) in the bush, all have died out, so that to start again one would have to send to the more fortunate bee-man and buy from them. The game is too risky.

G. A. Z., North Rockhampton, Q.—Up till now we had a very tolerable winter but I believe we will get frosty weather yet. Local bees are getting a little lively at present on account of the warm days we have. I hope we shall have a better honey season ahead of us than we have just passed through.

Five weeks ago I paid a visit to Mr. Whiting, Goowoonga, 20 miles from Rockhampton who is the owner of a beautiful homestead with over 200 Colonies of bees. I was surprised to see his bees at work in full swing while ours were idle. Although very young, with a good wife and a grown up family not too small, I found Mr. Whiting a very industrious man in all the work he is doing, even old men who wish to can go there and learn of him, his hospitality towards strangers will also serve as an example.

The extracting of honey is done there in the quickest and best manner I can think of with little or no expense. On a platform about five feet high the capping of frames is done by a four framed extractor. The honey is extracted from the frames or is running from there in a spouting through a strainer into large tanks below, this is saving a lot of labour, in fact all I saw there is on a labor saving, scheme in bee-keeping as well as in farming. Mr. Whiting in his work is very inventive and I wish him much success and he will be successful.

CAPPINGS.

A beekeeper, writing in "Gleanings," says:—I have moved bees without closing entrances, but did it after night. Quarts of bees clustered quietly at the entrances. It would be necessary to cover the hives with sheets in the day time. There is much less danger of smothering when the entrances are kept open.

The editor of "Gleanings" says:—A good deal of bee-moving is done at night, and it seems to me it would be perfectly feasible to leave off the entrance-strips, because, even if the bees did get to flying out in the dark, they would not be able to do much damage to horses or men.

Irish Honey Market.—Prices in Dublin: Sections, 1sts 6½d; 2nds, 6d; 3rds, 5½d.; inferior, by weight, as run honey. Extracted honey, 5d per lb. in bulk; skep honey, 3d per lb. in bulk.

The value of Honey imported into the United Kingdom in the month of March, 1906 was £3,106. (From a return supplied by H.M. Customs, London.)

Workmen Find Honey in Hawaiian Capital.—Workmen making repairs in the former palace in Honolulo, now the territorial capital, occupied by Governor Carter, discovered a great store of honey under the planks, just outside of the Governor's windows. Ths honey was discovered owing to a leak through which some of it oozed. On removing the boards a space five feet square was found to be packed for twenty-two inches deep with rich comb. The sweet find was divided among the officers of the territory.—"British Bee Journal."

The "British Bee Journal" says - The Surrey Beekeepeers' Association, in its Annual Report, gives during the past year they had 132 new members, giving a total of 663, an advance of twenty on last year's roll. The number of visits by experts was 23 more, and the total stocks examined had increased by about 200 in 1905.

A German writer says that he moved a colony of bees quite a long distance, and the next day a crowd of drones returned to the old stand, but not a single worker bee.

Never spread brood when there is already present all the brood the bees can cover. Spreading brood at such a time can only result in loss.

Some of the most scientific writers on apiculture advise not to breed from the queen whose colony produced the very largest yield of honey, but to breed from those that average a little better each year, claiming the former is only a sport, and not so apt to reproduce those qualities, and also claiming the latter more of a fixed type, and thus more apt to reproduce their kind. That sounds reasonable. I confess, though, its hard for me to keep from breeding from the queen whose colony has produced the largest yield of honey, other things being favourable to use such queen. I don't do it, either.--Exchange.

Prof. Paige was asked if there are less bee-diseases to-day than there were 25 years ago. "I do not think so," said he, "but if were to answer jokingly I should say 'No,' because there are less bees than there were then, and for the same reason that they say black sheep eat less than the white, because there are fewer of them."—"American Bee Journal."

It became necessary for a neighbour to move an apiary of 35 colonies of bees about 100 yards. We selected a cool time when the bees were not flying. We used the usual precautions to prevent the bees returning to the old location, but more or less bees returned to the old location from every colony but one. Of this one colony every bee stayed just where they were put—not a single bee returned. That colony was smothered. Good way to keep any of the bees from returning to old location. Can't say, though, that they like it. Who will give us a more practicable way of moving bees a short distance, without any returning?—Exchange.

In moving bees in spring, I have come to the conclusion that they can be shifted to any distance over half a mile with little or no precaution, because at that season bees forage only near their hiyes. Until they begin to take distant flights they adopt themselves to any new location without any question. Last season I new of six hives being shifted a bare half-mile, but the new surroundings were thoroughly dissimilar. Not a bee returned to the former sight. On several otner occasions I have information to a similar effect, convincing me that until May little danger may be apprehended. —D. M. M. Banff in "British Bee Journal."

An American writer says it does not pay to use the solar extractor for any thing but cappings and new combs. For old combs he uses a German wax-press. Before he began the use of the latter he believes he must have thrown away over 100 dollars worth of old combs.

A French exchange relates a curious case that occurred in France. A certain man there had a chronic inflammation of the eyes, that baffled the skill of the physicians. It so happened that he was stung one day on the left eyebrow. The next morning, to his great surprise, the light was no longer painful to the left eye. Attributing the good result to the action of the sting, he applied one to the right eyebrow, with exactly the same result. Strange as the case may seem, it is no more incredible than the many instances of cures of rheumatism that have been reported for years.—Exchange.

A writer in the "British Bee Journal" says: As to dryness of hives and cleanliness, a favourite resort of bees is a hollow tree. I have seen many in this position where they have lived for years. There must always in such a position be more or less damp from decayed wood. In such a place all the dead bees and debris of the hive must fall to the bottom, and these accumulate year after year; no spring cleaning is done for them, but foul brood does not seem to clear them out! It is recommended to set hives over six feet apart; in a bee-house I made a good many years ago for six hives, they were so near together they almost touched. At the swarming season, when "hanging out," the bees came in contact with one another, and seemed to fraternise in the most friendly manner, but I do not remember losing queens under these circumstances.

On the question of introducing queens Mr. E. G. Penglase says:—There are several good ways to introduce, but the one I always practice is to introduce directly after taking the queen away from the bees. This is the plan I recommend, but one hole in the cage should be full of candy so that the queen don't get out for 36 hours. I am continually introducing queens from one colony to others, and I find the above the easiest way. Leaving the bees alone for a day or two is best when introducing.

A writer in the "British Bee Journal" says:—If the mould is rubbed with glycerine it will not crack, however quickly the wax is cooled. A Roslin beekeeper, who gave me the 'wrinkle,' says you may place the wax on ice to cool and it will not crack. I have never done that; but cooling it in the ordinary way I find it never cracks.

Doolittle says:—After studying on and trying very many of these anti-swarming plans I find that they all fail sometimes, for it is natural for bees to swarm. So I have concluded to let 'em swarm.

To dampen smoker fuel may seem like strange advice, but it improves the lasting qualities of some kinds of fuel—planer shavings for instance. It may need some dry fuel to get the fire started, but, when well going, damp fuel is really an improvement. It does not blaze, it gives more smoke, and it lasts longer. Try it.

Next spring I shall put supers on all my colonies just as soon as they are strong enough to take two 45-lb. supers each. Then, if they shall swarm after this I will take away their old queens. After all desire for swarming has passed I will requeen again. I requeened 300 colodies last year, while I prevented swarming, and think I did not lose a pound of honey by re-queening. Some colonies sulked and would not work, and some used all their energy in raising brood, but would not make any surplus. This year I shall try to head off the desire to swarm and sulk, and, at the same time, start all at work as fast as they can occupy two large supers. A super that holds less than 32 pounds is no good here, only to cause excessive swarming.—*Beekeepers' Review.*

The "British Bee Journal" says:—It is a fact that in bee-life there can be a reproduction without fecundation, i.e., that drones raised from the eggs of an unmated queen can fertilize a young queen just as a normal drone can.