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Whole No

NOTES AND COMMENTS

By J. L. BYER.

Retail Packages for Honey.

Only a few days ago we had the pleasure of having Mr. E. G. Hand of Fenelon Falls spend a day with us. Among other things discussed at the "convention," the subject of retailing honey came in for due attention. As most of the readers of this Journal are aware, Mr. Hand is a strenuous advocate of pushing the home market for all it is worth, and has in his own town and vicinity exemplified the fact that with a systematic plan of placing good honey before the public, much more honey will be consumed than is the case when ordinary, slipshod methods are followed. While the experience of extensive retailers seems to prove conclusively that for the town trade it pays to put up honey in glass, yet to the writer's mind it seems doubtful whether this is true as regards the country and village trade. For example, in a village near us, of 1,200 population, last year, over 2,000 pounds of honey was sold in packages of 10 and 5-pound pails. To my knowledge not a single pound was sold in glass, and I can hardly think that so much honey would have been sold provided the honey had all been put up in 1-pound

packages. On the other hand, it might be argued that some who would pay 15 cents for a single pound would never think of investing 50 cents at one time for a 5-pound pail. In fact, Mr. Hand said he knew of one family who annually bought over 150 pound-bottles, who would never think of buying a 5-pound pail at one time. Personally, I feel inclined to think that if there were no pound packages in sight that more than likely the same family would buy 5-pound pails, and incidentally come to the conclusion that it was much the cheaper way of buying honey. From the producer's standpoint there is not half as much work in selling in pails as there is in putting up in glass, and in the case of the pails being used the consumers become educated to the use of honey in the granulated form, and it is surprising how many become partial to honey in that condition. All things considered, while I would not discourage any way of increasing the sale of honey, yet in my trade, after taking into consideration the demand in my own locality, I feel a bit slow about investing in glass as long as I can sell in tin packages as readily as in the past.

British Methods of Treating Foul

Surprising how much difference in opinion and methods in connection with many things appeultural that there are between "we uns" and our British brethren. A careful perusal of the September "Bee-keepers' Record" (British), just to hand, has led me to form this conclusion. I was especially impressed with the different ideas entertained by bee-keepers of the Old Sod in relation to the treatment of foul brood, as compared with the ideas of most apiarists on this side of the Atlantic. While numerous drug treatments have been recommended from time to time, all, up to the present, have been found wanting, and I feel safe in saying that not 2 per cent of the bee-keepers of Canada and the United States have even a little faith in the use of drugs in treating foul brood. To show that just the opposite is the case in England, I will quote a couple of replies given by the Editor in response to queries sent in by subscribers. In both cases samples of comb were mailed for inspection, and were diagnosed as follows:

No. 1.—"There is foul broad of old standing in the hive. It does not seem to be a bad case, and the bees might get over it by the careful-use of remedies."

No. 2.—"The larger piece of comb—with dead brood in worker cells—showed signs of foul brood, though not in pronounced form. There is no cause for great alarm, and the case will be met by using ordinary preventatives."

Imagine any of our authorities giving such advice to enquiring bee-keepers! To say the least, it would require considerable hardihood to enable any one to advise in that way, even if they were convinced of the efficacy of such treatment. All of which goes to show that "locality" cuts quite a figure, even in the methods of handling foul brood, and that possibly the disease itself is less virulent in England than in America. Another thing that will strike the Canadian reader as a bit odd is the prominence given to advertise-

ments of "driven bees" for sale. seems quite a trade is done in driving bees from box or straw hives and then selling the bees by the pound. An imported item of interest in the "Record" is a report of a meeting of the United States House of Representatives, during the time when the Pure Food Bill was under consideration. One of the members, speaking in favor of the Bill, exhibited a bottle labelled "Pure Honey," which was proven by analysis to contain only glucose, with a dead bee inserted by the manufacturer to deceive the public. We have heard of people being able to tell the color of the cows that produced the butter by certain visible signs in said butter, but this is the first time we have learned of the same lines of argument being presented to prove the purity of honey. Come to think of it, a certain gentleman once asked me if all honey had grubs in it, further stating that the honey he bought from a bee-keeper (not a farmer bee-keeper. either) sometimes had the larval accompaniment. Hadn't thought before of the advertising value of the scheme, but, as our science master used to say. "Now I see the point."

Warm Water for Bees.

No doubt nearly every bee-keeper has noticed how bees seem to like to sip up water from pools near manure piles. A great many have explained the matter by assuming that the bees were attracted by the salty quality of such water. Some recent experiments in Europe, recorded in the "American Bee-keeper" by Adrian Getaz, would seem to prove rather that the bees were attracted to such water by the higher temperature of these pools. In the experiments in question the temperature of the pools near the manure piles was 70°, while that of other sources of supply was only 57°. Although

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the bees were carrying freely from the first-named source, yet when a trough of pure water, heated by an alcohol lamp to 80°, was placed near the pool the bees left the impure water, and in the course of a couple of days were working entirely on the water with temperature of 80°.

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Move Only Strong Colonies to Buckwheat.

Although I have had but little experience in moving bees to buckwheat. one thing I have learned to my own satisfaction is that it don't pay to move any but very strong colonies. For some reason or other the difference in results between strong and weak colonies is much more apparent than during the clover flow. A year ago I moved a load 10 miles away. Half of the number were very strong colonies. the other half fair nuclei, moved in the hope that they might fill up for winter. While the strong colonies stored considerable surplus (the flow was very light), the nuclei were little better when brought home than when they were moved away.

Honey Dew.

What little honey dew we have had from time to time has always been of a fair quality. When Friend McEvoy told me early in the season that he had extracted quite a quantity of honey dew that was simply "horrid," I was prepared to see something radically different to anything that had ever come under my notice. While at the Toronto Fair, however, I tested a little of the "genuine article" from the shelf of a couple of the exhibitors, and I felt ready to endorse our inspector's description, only I would want to preface the "horrid" with several qualifying adjectives. In our humble opinion such stuff should not be offered for sale at any price, at least, in a retail way. It might be possible to use it for manufacturing purposes, but for what line of goods it would be adapted to, I am at a loss to suggest.

Markham, Ont.

DON'T LET THE BEES "SLIDE."

Don't forget that there is a winter coming.

Don't forget that it will soon be here.

Don't forget that bees cannot live
through the winter on beeswax and air.

Don't forget to see that they have

something more substantial.

Don't forget to do it until November.

Don't forget to do it until December.

Don't forget that the sooner you do
it the better it can be done.

Don't think that because you have only a few colonies of bees they do not need attention.

Don't think that, if they do need it, any old time before Christmas will do to fix them up.

Don't think that you haven't time just now.

Don't think that you can't leave the plowing or the roots for a few hours.

Don't think that the bees have plenty of honey for winter unless you know they have—unless you have seen it, or given it to them, or felt the weight of it.

Don't guess at it. Don't take chances. Live bees are worth money: dead bees are not. Remember that bees are living animals or insects and if they haven't enough of the proper food to keep them alive they will die. The fact that you can give them their winter's supply of food all at once (if they haven't already got it for themselves) is no excuse for not giving it to them at the proper time. Look them up. If they haven't a laying queen and enough honey for winter, see that they are "put right." The sooner the better. Do it now .- E. G. H., in "Farmers' Advocate."

Combs, Full Sheets or Starters For Swarms

As a rule it does not pay to give a newly hived swarm fully-built-out comb, yet it does not do to be dogmatic and say: "It never pays.", I have employed them this year with, I consider, good effect. Three lots of driven bees, owing to paucity in numbers, went under in early spring, and their combs, all fresh and new, were used to house English swarms, with a distinct saving of valuable time and material for the new swarms, and no loss. So that all over it was pure gain. These bees had consumed all their gorged stores en route, and so were not provided with special material for building. With a new-swarmed lot in the home apiary it is different. Their honey-sacs are full to repletion, their wax-sheet "factory" is in full swing, and the process of construction in the wax-pockets goes on automatically. The bees are hungering and thirsting for combbuilding, and to hinder their desire would be a pure waste of valuable material. All this rules fully drawn-out comb out of court in competition with full sheets or starters. Not only so, but with a full flow on, bees block up the cells with honey as gathered from the fields, and soon start capping the stores, thereby blocking the queen and cramping her egg-laying powers by restricting the cell-area in which she can lay. Super room, although placed on, will generally be neglected, as the bees seem to reason it out that it is a saving of time and labor to store in every vacant cell below, to the detriment of surplus stores, and the lessening of the population of the hive. Therefore, hiving on full frames of comb must come third in order every time.

We are taught-and the teaching is wise-that we can "spare the bees" by giving full sheets of wired foundation to swarms with advantage to all concerned-bees, bee-keepers, large population, finely-built combs, and extra surplus honey. A free use of foundation upstairs and down is to be commended, as a rule,-but there are exceptions. I think the subject is of such importance that I would like to see a full discussion, conveying the results of experience, showing in what, if any, circumstances hiving on starters is a saving to bees and bee-keeper, because I contend, at times, it is.

First.-A strong swarm of bees in the full flush of a heavy flow generally builds so quickly that the cell surface far outruns the queen's powers of occupation. Here the sheets of foundation hurry up matters still further, and capping honey starts in the broodframes as a serious business instead of the surplus being stored above. The queen, if prolific, may force the pace later on, and compel some honey to be uncapped and stored elsewhere, but here we have a large amount of extra work imposed on the bees, which they rather resent, because they frequently sulk and cramp the queen's powers of ovipositing. With starters only she keeps in line and hurries on combbuilding, so that there is no time or opportunity to seal cells in the brood nest. So evenly balanced indeed are her powers of egg-laying and the bees' powers of comb-building that they go on as if part and parcel of one plan, to the mutual advantage of all internal arrangements.

Second.—An average swarm, building comb over the surface of nine or ten frames, has its forces spread out too much for overtaking the best and

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quickest work. Concentrated on, say, six frames of starters, heat is generated with the waste of less caloric, a larger relative force is freed from constructive duties to forage abroad for fresh stores, while a further contingent can devote its attention to necessary attendance on eggs and larvae. There is, in a word, a better division of labor at less cost of heat and tissue. A large swarm should at first receive the full complement of frames, and in 24 hours all not well covered with bees should be temporarily withdrawn. There is here a saving of foundation, with, I think, at times, an acceleration of work.

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Third.—So many novices, and others, insert half or quarter sheets of foundation so carelessly that combs are badly built, while with some only of these inserted the added weight of bees hanging from them causes even good foundation to sag and stretch, resulting in badly-shaped cells, frequently almost oval in form. Starters in such a case prove not only true economy, but a distinct gain, as far more regular combs are obtained, which prove a valuable asset in the future history of the colony.

Fourth.—But these quarter, half or three-quarter sheets may frequently give way, causing not only a nasty breakdown, but a distinct loss of foundation and honey, and a very considerable consumption of valuable time. Nothing is more aggravating than discovering, after two or three days of hard and indefatigable work on the part of the bees, that all their toilsome labors have ended in naught, and that it has to be all tediously gone over again. If badly inserted, full sheets are even worse.

These are only a few sample cases, which could be very largely added to by every bee-keeper who hives a large

number of swarms. The restricted area of. say, six frames, gives comb-building for about ten days after hiving, and during that time it seems to me to be an almost universal rule that bees construct only their worker-cells. So here we have, with starters only, the best possible comb built, with no drone cells. But, as I have noted above, a further benefit follows. With a good heavy flow on, many workers are set at liberty to forage, and part of this material, if stored, would block the brood-body, so almost from the first a rack of sections should be given above to supply room for this overplus. Ator about-the end of ten days, more frames may be added, but these should, in general, be furnished with full sheets of foundation. In using starters one sheet provides five frames, which means a considerable saving.

The chief dread with many is that when only starters are provided bees build too much drone-comb. That is so when the whole set of frames are given to even a strong swarm. when about four of a ten-frame hive are withdrawn a day after hiving, the restricted room enables the queen's egg-laying and the workers' combbuilding to keep pace, while the superroom above hinders any thought of hurrying on large cells for storage or drone-rearing. Those who find this being done might try close spacing, which very effectually prohibits the building of drone-comb. If every alternate frame has its W.B.C. ends drawn back, so that only every second frame has its metal ends acting as spacers, the bees build only worker-cells. Of course, these should be replaced in their true positon, giving a regular double bee-space between each comb.

Second swarms, or first swarms headed by young unfertilized queens, can be trusted to build only workercells, while the same may be said safely of nucleus hives, to which only starters have been given, and, indeed, of any lot of bees reduced to a small number of frames, if bees are not too numerous. Such a lot may be kept on building such combs if frames of brood are withdrawn to keep them from becoming too strong.—D. M. M., Banff, in "British Bee Journal."

FIRST PRIZES AT THE NATIONAL EXHIBITION, TORONTO.

Best and most attractive display of 50 lbs. of extracted granulated clover honey, R. H. Smith, St. Thomas, Ont.

Best and most attractive display of 50 lbs. of extracted granulated linden honey, George Laing, Milton, Ont.

Best display of 300 lbs. of liquid extracted honey (clover, linden, buckwheat or thistle), R. H. Smith.

Best 300 lbs. of comb honey in sections (clover, linden, buckwheat or thistle), D. Anguish, Scottville, Ont.

Best 24 sections comb honey (any variety), quality to be considered, D. Anguish.

Best 100 lbs. of extracted liquid linden honey, George Laing.

Best 100 lbs. extracted liquid clover honey, George Laing.

Best 100 lbs. of extracted liquid, any other variety, R. H. Smith.

Best display of 100 lbs. of extracted liquid honey, any kind, Grainger & Co., Toronto.

Best 20 pounds of extracted liquid clover honey, in glass, George Laing.

Best 20 lbs., of extracted liquid linden honey in glass, no exhibit.

Best 20 lbs. of extracted liquid buckwheat honey, in glass, R. H. Smith.

Best display of beeswax, not less than ten lbs., Arthur Laing, Hamilton, Ont.

Best 10 lbs. of beeswax, soft, bright yellow wax to be given preference, Grainger & Co. Best exhibit of Italian bees, with queen, in single comb observatory hive, F. W. Krouse, Guelph, Ont.

Best exhibit of any other race of bees, with queen, in single comb observatory hive, Grainger & Co.

Best and most practical new invention for the apiarist, never shown before at an Exhibition of this Association, Grainger & Co.

To the exhibitor making the largest, best, most interesting, attractive and instructive display in this department, including any or all of the preceding sections, R. H. Smith.

Best display of 200 lbs. comb and extract honey, suitable for a grocer's window or counter, Grainger & Co.

A. E. Hoshal, Beamsville, judged. The exhibition has been a great success. Honey show good for the seasm.

AIM TO PROVIDE PURE MAPLE SUGAR.

A recent discovery in chemistry has made it possible to detect adulteration of maple sugar with either cane or beet sugar, and the Department of Inland Revenue is now having samples analyzed of the maple sugar sold throughout the country. Until the results of the tests have been made known officially it cannot be said positively that adulteration is practised to any great extent, but the general impression is that a large proportion of the so-called maple sugar contains but a small quantity of the true saccharine In the Ottawa Valley, of the maple. at all events, ingenious farmers have been known to purchase large quantities of ordinary sugar during the winter and to offer maple sugar and syrup for sale in the sap season in quantities far beyond the probable capacity of their sugar bushes. Maple syrup has been known to be manufactured not a hundred miles from Ottawa from can sugar flavored with maple wood. In Parliament last session the Government was strongly urged to take action to protect the honest producers of Quebec and Eastern Ontario. The tests now being made are doubtless the outcome of this agitation. Analyses are also being made by the Department of samples of honey and milk offered for sale in the several cities and towns o the Dominion.

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A.-From repositories f have not pro because they the number o tended to wi not have a go perature can 48°, I would using leaves you prefer to above ground arge; 10'x10' high, would colonies, it de and size of su walls and ce and matched with a triple er space being r sawdust and eft hollow. L hould be prov laft running brough the c gulate the fic Thomas, O .

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QUERIES and ANSWERS

Q.—I am thinking of building a beehouse above ground. Will you kindly tell me how to build one which will be safe from frost? I can get plenty of leaves from off trees. What size shall I require for 50 hives and supers? By so doing you will greatly oblige.—W. M. S., Madoc, Ont.

A .- From what I have seen of winter repositories for bees above ground they have not provem satisfactory, probably because they were built too large for the number of colonies that it was intended to winter in them. If I could not have a good cellar, where the temperature can be maintained at 40° to 48°, I would pack the hives in clamps, using leaves for packing. However, if you prefer to try a winter repository above ground, I would not make it large; 10'x10' or 12'x12' inside, and 7' high, would be large enough for 50 colonies, it depending on the number and size of supers. I would make the walls and ceiling of 2"x4" scantling and matched lumber, this being built with a triple space, the outer and inher space being packed with dry leaves or sawdust and the middle space being eft hollow. Double, tight-fitting door hould be provided, also a ventilation haft running from near the floor up brough the ceiling, with a slide to egulate the flow of air.—R. H. Smith. t. Thomas, Ont.

A sensible man neither depreciates imself nor makes light of his abilities. If dogs and children dislike a man is up to others to avoid him.

A FEW OBSERVATIONS AND EX-

(By Arthur Laing.)

Editor Canadian Bee Journal:

Perhaps I might be justified in calling this letter "Stray Straws," like Dr. Miller heads his articles in Gleanings. I am afraid however, that the quality of the straw will be so poor that anyone who looks them over will be sure that they did not come from Dr. Miller's stack. I wish to refer for a moment or two to two items by J. L. Byer in September number of C.B.J. First, his reference to the bees' apparent dislike to dark clothing. On the 24th of May I had a friend in my yard who were a black hat and the way the bees prodded that hat was certainly an eye-opener to me, and it would have been a miracle if it hadn't been an eyecloser for him, but for the fact that he had a yell on.

In the second place, with reference to Bro. Byers' experience with the buckwheat this season. Well, I, too, have had a little experience this year with buckwheat, but unfortunately I had to move 16 miles in order to reach I moved 18 hives to where there was about 100 acres about the first of August, and went over just before Toronto Fair, thinking I might get 400 or 500 lbs. Well, by hard scraping I got 20 pounds of thin buckwheat honey to show at the fair and when the fair was over I went back looking again for 400 or 500 pounds, and got 12 sections that I believe I could sell for \$1.25, seeing that I am a good salesman, and the price of honey being unusually high. I also got one comb that I think has nearly 5 pounds of honey in, and the bees will require little, if any, feeding for winter, but on the whole, I feel as though I had had a lot of work for a little pay. This is the first time I have ever moved any

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bees to buckwheat, and I am wondering if my experience is the usual one. Bro. Holtermann and Bro. Pettit have had an extended experience with buckwheat and I wish they would be kind enough to tell us through the columns of the C.B.J. what their experience would warrant expecting from, say 75 hives of bees in the immediate vicinity of 100 acres of buckwheat, taking one year with another. I personally would like to hear from several on this subject, giving straight facts and figures, and also stating whether the buckwheat will produce more honey when grown on one soil than another.

I now wish to refer to an interesting experience a friend of mine has been having for the last three or four years with foul brood. About four or five years ago he was melting up combs of diseased brood and I examined it and thought it was foul brood all right, and from that time until this fall my friend has been fighting this thing. thinking sometimes he was entirely free of it and then having it break out again. This fall I was in his yard and he was talking of melting up all his combs and putting his bees on foundation and feeding up for winter. Well, I looked at what he called his worst hive, and I found one cell that looked very much like foul brood, but the rest did not look like it, and I told him I did not think it was foul brood, and he had better send for the inspector before destroying his combs. So the inspector came and pronounced it, I understand, starved brood. Now, I do not think for a moment that the inspector's judgment is absolutely infallible, but in this case I think it is more than likely that he is correct, but whether he be right or wrong, one thing I am absolutely convinced of in my own mind, and that is this, that there is a stage in connection with foul brood when no man canetell with the

naked eye whether it is genuine foul brood or some other kind of diseased brood, and I am also as firmly convinced that if you will leave it alone for a few weeks, if it is genuine foul brood it will make ftself known beyond doubt, and one need not incur any risk in waiting if you have a fair colony and keep your entrance well narrowed down. I think it quite possible that many colonies have been treated for foul brood that never had it and just mention this incident as a caution. We have enough real difficulties to contend with in this world without wrestling with imaginary ones. Let us be guided by the old saying: "Be sure you are right, then go ahead."

Ash, Ont, Sept. 23. 1906.

NATURAL DISINFECTANTS.

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 larvae, and in combs that have been bred in. He was able to extract from a piece of comb weighing 41 grains 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 larvae, 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-

supposed bachs rese so, for for is rapidly found appr the dry ro which shot tartaric ac cane sugar. ance in the ges by oxid A third the etherea these that escapes from gathering, (the flowers. nel, mint ar tues. Their estimable ar a healthy fo development the colony. colony prod formic and rapid flow o increase, an condition to

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He conclude keeper to loo dition of his law proper who heat, that always to prefetants to no healthy condition be little to fea is Bee Journ

foul brood.

Excursion Facuration rates accursion rates foronto will be Wednesday ar th and 8th, i glands, which for a long time, were supposed to contain acid. M. Reidenbachs 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 larvae, as it changes by oxidation into formic acid.

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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. An active and vigorous colony produces a large quantity of formic and tartaric acid, and with a mpid 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 beekeeper to look after the sanitary condition of his hives, to be sure that they have proper ventilation, and good food; in fact, that they should be in 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.—Brith Bee Journal Translation.

Excursion Rates: One fare return acursion rates from outside points to foronto will be in force on all lines on Wednesday and Thursday, November th and 8th, in connection with consultons.

TRANSLATIONS FROM GERMAN

(By Jacob Haberer.)

Leipziger Bienenzeitung: Over 1,060 bee-keepers are queen breeders in Switzerland. Inquiries by means of circulars as to preference of races of be showed 77 per cent. in favor of the common blacks, 15 per cent. in favor of hybrids, and only a few in favor of Italians.

They must have a splendid strain of blacks over there, likely I have some of them. A friend of mine imposed two queens from Italy some time ago, they looked good and their colonies were very strong. I secured some queens from him bred from these, but most of the colonies I introduced them into are now nice "black Italians."

F. Greiner, in an article on Bes-Keeping in America, in the L. B. ?, says: "We find no demand for extrasted honey here, or at least not at a fair price."

We do not think so on this end of the continent, do we?

From the same journal, said to be copied from the C.B.J., we learn that Ontario has a foul brood law now, and has an inspector to conduct the examination of colonies and other necessay works, and that "the expense for same is raised by a tax of 3c per colony."

This is news. I have not paid my tax yet.

According to The Leipziger Blenanzeitung, the honey crop is also a failure in Germany owing to unsettled weather after a good prospect in spring.

Zurich, Ont.

Jefferson Thompson, chairman of the Racing Board of the Automobile association, was praising the French as automobilists.

"The French are a remarkable and odd people," he said. "In fencing and, above all, in motoring, they excel. In football, in racing, and, above all, in shooting, they are nowhere.

"Three French sportsmen were once out after robins and cuckoos. A robin appeared overhead; they fired simultaneously, but the robin escaped.

"Then they all asked together: "Who missed that time?"

THE CANADIAN BEE JOURNAL

Devoted to the Interests of Bee-keepers

Published Monthly by

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Editor, W. J. Craig.

October, 1906

EDITORIAL NOTES: 1

The Canadian Bee Journal three months free to any bee-keeper, not already a subscriber, who sends us his name and address. Tell your bee-keeping friends about this offer, so we can enter them on our list for the trial trip.

As announced elsewhere in this issue, the annual meeting of the Ontario Beekeepers' Association will be held in Toronto, November 7th, 8th and 9th. The place of meeting has not yet been definitely arranged. The County Council chamber has been asked for, and since one of our number, Mr. J. D. Evans, has to do with the permission, we can reasonably assume that it will be given.

The Horticultural and Honey Show will be held in the Massey Hall as before.

We presume that the usual hotel and railway arrangements will be made by the Secretary. Members and delegates will be safe in purchasing single fare tickets and securing railway certificates for lowest return rates.

The O. B. K. A. Executive are anxious to have a representative and creditable display of honey made at the Horticultural and Honey Show, November 5th to 10th (convention week), and requests that the members of the Association supply them with suitable

material, extracted, liquid and granulated honeys, in quantities about 50 or 60 pounds, and a few dozen of best comb. We presume that a limited quantity of good buckwheat, either comb or extracted, would be acceptable by way of variety, and as the principal purpose of the exhibit is to be its advertising and educative value, such honey products as honey vinegar, mead, honey gingerbread, honey cakes; fruits preserved in honey, honey soap, honey salve, and such-like, should form a part. The members of the Association should feel it incumbent upon them to make the display as attractive and valuable as possible.

As already announced, the exhibit is to be a collective one, and will be put up by a suitable committee appointed by the Executive. One or more capable persons are to demonstrate or talk honey and its various uses at times during the Show, distribute honey life erature, recipes, etc. Full market price will be paid for any honey sent suitable for this purpose. See that the figuid honey is perfectly liquid, and the granulated as solid as possible. Parties purposing sending should write William Couse, Secretary of the O. B. K. A., Streetsville, Ont., stating the nature of their contribution. All honey, etc., intended for the Show should be addressed to William Couse, care Superintendent Horticultural and Honey Show, Massey Hall, Toronto. each package with the name of the sender.

Just like Jake! The following brief note from friend Jacob Alpaugh tells of his again shaking loose from all that binds him in bee-keeping, and that the "Bee Man of Dobbinton" is off to make another chapter in his history in the sunny land of California. Well, friend Jacob, we all wish you contin-

ued succes

Friend C

the informa any of its cern, that I at Dobbint everything This is the made in sel my bicycle About the have left is shotgun and ever wagged \$150, and is any sports C. B. J. tha step out and Hurrah fo last of this later. Any o ride with me

Dobbinton,

Editor C. B.

Please find ual meeting ot learned y ut have writ County Counc Re Honey & or a good exl n. We wan hoice honey t The commit ssociation m nd they are ects for this ive gone to a he famous Bla ind present d ive music.

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Friend Craig.-I might just say, for the information of the C. B. J., and any of its readers that this may contern, that I have sold my apiary here at Dobbinton, of 115 colonies, and everything in connection therewith. This is the cleanest sweep I have ever made in selling out, disposing of even my bicycle and my full kit of tools. About the only personal property I have left is a first-class double-barrel shotgun and as good a rabbit-dog as ever wagged a tail, which I value at \$150, and is not for sale. If there are any sports among the readers of the C. B. J. that can beat this, let them step out and give me a stump.

Hurrah for California! About the last of this month or perhaps a little later. Any one wishing to go out can ride with me in a tourist car.

J. ALPAUGH.

Dobbinton, Ont., October 1.

Editor C. B. J.

Please find herewith program for annual meeting of the O. B. K. A. I have not learned yet what hall we will get, but have written Mr. J. D. Evans for County Council chamber.

Re Honey Show—The prospects are or a good exhibit, considering the sea-on. We want all who can send some holce honey to do so.

The committee of the Hortfcultural association met about ten days ago, and they are pleased with the prosects for this year's exhibition. They are gone to a heavy expense to have the famous Black Dyke Band of Engind present during the exhibition to five music.

Yours truly,

WILLIAM COUSE.

Streetsville, Ont., October 1, 1906.

The annual meeting of the O.B.K.A. will be held in Toronto on Wednesday, Thursday and Friday, November 7th, 8th and 9th, 1906.

THE PROGRAM.

Wednesday:

- 2 p.m.-Minutes and discussion
- 2.30 p.m.—President's address, Vice-President to open discussion.
- 3.30—"Production of Comb Honey," paper by U. H. Bowen, Niagara Falls. Question drawer on this subject.
 - 5 p.m.—Addresses by American guests.
- 7.30 p.m.—"Wintering Repositories," paper by Wm. Couse, Streetsville. J. Alpaugh, Dobbinton, to open discussion.
- 8.30 p.m.-Paper.

Thursday:

- a.m.—Discussion on exhibit of Apiarian appliances.
- 10 a.m.—"Bee-keeping as an Occupation for Women," paper, and discussion by ladies present.
- 11 a.m.—Questions on marketing and values of honey, John Timbers, Cherrywood, in charge.
- 2 p.m.—Address by Hon. Nelson Monteith, Minister of Agriculture.

Official reports.

- 3 p.m.-Election of officers.
- 4 p.m.—Question drawer, J. L. Byer, Markham, in charge.
- 7.30 p.m.—How many colonies of bees may be profitably kept in a locality? paper, G. A. Saunders, Agerton, to open discussion.
- 8.30 p.m.—"Spring Management," paper by James Storer, Lindsay.

Question drawer on spring management.

Friday

- 9 a.m.—"Fall Management," paper by Denis Nolan.
- 10 a.m.—Question drawer on introducing queens.
- 11 a.m.—Unfinished business.

All bee-keepers are invited to attend and take part in the discussions, and also to bring any useful appliances for exhibition.

WM. COUSE, Secretary.

Annual Meeting

Ontario
Bee keepers
Association

The President—I will now call upon another American visitor to address the Convention, Mr. W. Z. Hutchinson. He may be able to give us his reasons for awarding the prizes so and so at the Honey Show.

(Michigan)-It Hutchinson Mr. seems to me most of the exhibits were pretty good, and I have very little criticism to make. There was one point I might mention, and that is the idea of simplicity. I think, perhaps, occasionally an exhibitor errs in making too elaborate an exhibit. For instance, he makes a pyramid, and then scatters some flowers around the table, and then puts on flags. It makes a person think of an over-dressed woman. Now, in a picture we try to bring out one idea. and everything else centers upon that one idea, so that the mind will not wander from one point to another. Let it be just as simple as possible. We might put up a pyramid with nothing but the plain bottles or glassesno trimmings, in other words. I would say that the watchword should be "Simplicity" in making those exhibits. Perhaps there were only one or two exhibits that came under that head. What we want in judging is a score card. You have five or ten bottles of honey to pass upon, and you take up one and look at it, and it is a very fine color. Then you come to another and dip your spoon into it, and you find the flavor is good. But where the color is off the flavor may be better. Then a good colored one will have a very poor body, and so a person might go over them without coming to any conclusion, unless he had something

like a score-card to register the points. I suppose about 50 points out of the 100 would be for quality, and we test those different honeys, and get as near as we can to the best, and then we mark it down, giving them the number of points. Then we take up the question of color. As to the best color. it would be the clearest and whitest, That might be put in at 30 points, and in that way you don't know until the end of the judging who is going to get the prizes. Then as to the body. In some, bubbles will rise very quickly and others very slowly. Take the one that comes up the slowest, that one has the greatest body, and we give that the most number of body points. Then, when you get through, you figure up all the points, and the man who gets the most points gets the premium, and so on down. In that way you can satisfy yourself. Some one will say, "Why, my honey is the better flavor." and another says, "My honey has the best body," and if there is no method of judging one does not know why the other gets the prize. If we had thes score cards we could give each exhibitor a card showing how his honey stood on all the different points, ar then he could see why he failed. H could see where his honey lacked, an in that way there would be the educational feature, and there would be satisfaction. And more, the judges wou not have to answer any questions, be cause the score cards would show i Of course you must have a scale points. And it is the same way will the comb honey. There is, for instance the completeness of filling. say how many points should be give but perhaps 50 out of 100 for complet filling. Then there would be the sca running down the same way. there would be the completeness capping and the evenness of the comb

and then I tested. It stroy the considere The man we give him the think the quantum put to make aps, put quandundred. Que the main the clude other if Q—What

play? Mr. Hutchi how is on. er some one howing to th nd I think 80 would all de to bring o Q.-Which ce to, body Mr. Hutchin in this or olor, 50, 30 g Q-And whi Mr. Hutchin we display rrange the wi t of 300 poir per cent for proportion Mr. Holtern we to take in the display? ke a big dis would not. Mr. Hutchins m list shou

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points. and then I think the honey should be tested. It might seem a pity to deof the stroy the combs, but the quality should we test be considered. Then as to the display. as near The man who has the nicest display, hen we give him the highest score on that. I e numthink the quality should stand first. up the Just to make a quick estimate, perat color. aps, put quality at 50 points out of a whitest. hundred. Quality and flavor are really nts, and the main things. Quality would inntil the clude other things besides flavor. g to get

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Mr. Hutchinson—It depends on what show is on. At the Fair last September some one had, I think, an idea of showing to the public granulated honey and I think 80 points were given there. It would all depend on what you wanted to bring out.

Q.—Which would you give second

Mr. Hutchinson—I think I would put t in this order: Flavor, body and olor, 50, 30 and 20 points.

Q.-And what for display?

Mr. Hutchinson—If you are going to ave display you would have to remange the whole thing. I think that at of 300 points I would put perhaps per cent for display, and then make proportion the same for the others. Mr. Holtermann—Would you not ave to take into consideration the size the display? A large quantity would ake a big display and a small quanty would not.

Mr. Hutchinson—Exactly. The preium list should state the number of bats.

Mr. McEvoy-What about wax?

Mr. Hutchinson—Well, some persons wild give a premium for light-colored a. And then there is the cleanliness it; whether it is full of dirt or other lega substances. And some might be a preference for hard or soft wax

—the texture. I think I would put about a third each on the color, the cleanliness, and the texture.

Mr. Herschiser—I would like to ask which you consider the better wax, that made from white cappings, or that from the old combs, which is a bright yellow?

Mr. Hutchinson—So far as making foundation is concerned, I do not know that there is much difference. I do not suppose the white wax is really any better. Some of us like the look of it. It might be a harder and tougher wax, but it might not be so desirable for other reasons.

Mr. McEvoy-The bees will work the yellow wax the quicker, but for the comb supers the white wax 's preferable. I would give a third more for that wax.

Mr. G. Laing—When I was exhibiting I took pains to have a nice yellow wax, and I got third prize. I had the yellowest wax in the building.

Mr. Holmes--The Ontario bee-keepers have certainly been very specially favored this evening. First of all wehad a trip to that far-off southern land, Jamaica, and returned, without accident. We have been shown the advantages of bee-keeping in Canada, which is very satisfactory to us. Then we have had the pleasure of associating with our American cousins, who occupy a very warm place in our affections; and then, further, the Minister of Agriculture deigns to grace this occasion with his presence. I think we have been highly favored. The Minister comes to us, and he exhorts us not to rest content. He tells us that we have not yet quite attained to the best. I believe it is a well recognized fact that the best in any line or department is only reached by development, and he assures us that we have the sympathy, and the aid of his department in going on and developing

our specialty until in combination with the great dairy industry in the province we shall make this country virtually what it should be, a land flowing with milk and honey.

QUESTION DRAWER.

(In charge of Mr. Jacob Alpaugh.)

Q.-Will bees move eggs?

Mr. Alpaugh—My opinion is that they will carry them from place to place. My reasons are these: I have had queen cells built and eggs put in them and queens raised where the queen could not get to lay an egg.

Q.-Was a genuine queen raised?

Mr. Alpaugh—These were genuine queens. I have had many a queen cell built on brood, but I am not speaking of those.

Q.—What method does Mr. Herschiser use in extracting wax from old combs?

Mr. Herschiser-I will just explain to you the principle, and that is about as far as I can go. If you dip a sponge into ink, and then put on a pressure, that sponge will still be black. Any amount of squeezing will not take that black out, and if you put it in water you will squeeze it and get some more out of it. Just apply that principle in the extraction of wax. Of course, there is a good deal more in it than I have told. The matter is in process of experimentation yet, and I do not think it is advisable to lead you off in the wrong direction. I am not huite satisfied myself yet.

Q.—Please describe the points of a good smoker?

Mr. Alpaugh—Well, there are several. In the first place, you want a smoker that will work easy, and throw a good volume of smoke when it is wanted. You don't want one that is hanging back and the bees getting at you while you are making up smoke. You want one that is easily lighted, and one that will hold fire a good long time, and not in any way clumsy. These are a few

good points that I would consider. There are other good points, such as a smoker made out of brass, for instance, but the question of cost comes in there. We must have something that will last. Tin rusts out, while brass does not. If properly made and properly taken re of, it should last for ten years. I may say there is another good point, that the sparks cannot get into the bellows; they are excluded by a fine wire gauze or screen. There are smokers made where the draft goes in above the fire.

Mr. Herschiser—I find a weak point in some of them when you take off the nozzle a great many times it break off. I think that ought to be strengthened.

Q.—What do you mean by being easily lighted? Do you mean some way without removing the nozzle?

Mr. Alpaugh—Yes; one I would like to have where you could light it from a lighted match from the bottom without dumping it out. But I have not been using such a smoker, because I like a fire grate in the bottom, and that prevents my lighting it from the bottom.

Q.—What kind of a fire grate do you recommend.

Mr. Alpaugh—The fire rests on little grate.

Mr. Evans—I have two kinds. On is a loose fire grate that will come out and the other is a piece of perforate tin or sheet iron. I think the first on is superior.

Mr. Holtermann—I consider that get a good smoker is money well specified in think there is an objection in every smoker I know of at present; and the is, you want to get your grate so the it will stay where you put it. The should be some sort of a notch in the barrel, and a notch in the grate so the it will fit, and will stay there until move it. There are some smokers is are constantly throwing sparks on the state of the state of

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your hands and clothing, and that is a very serious defect. Another thing, you do not want a very wide barrel in proportion to the length of it.

Mr. Miller—I think the smoker is better made wide, the opposite to what Mr. Holtermann says. When once it is filled you do not puff it into a flame the same as you do when the fire box is small and the flame concentrated.

Mr. Holtermann—What is the size of your smoker?

Mr. Miller—It is four inches by about eight and a half. The bellows is about 7x10 inches, as near as I could tell.

Mr. Holtermann—We overcome that difficulty by moistening the material we use. If you do that it does not get to a flame. There is no necessity for giving it violent puffs.

Mr. Smith—What fuel do you use, Mr. Holtermann?

Mr. Holtermann—I use cedar bark, but in extracting time I use maple. I my to get the cedar bark as thick as cossible. I am looking after a better moker. Mr. Miller has a smoker, but am afraid of it.

Mr. Miller—It is nothing to be afraid to I assure you. When you get a trong colony of bees it is a necessity, have it so I can hold it between my nees. You have it in a handy place here you can use it without stopping. Mr. Alpaugh—L would say, Yes, once hey will give you three times as much noke and less fire and heat.

Mr. McEvoy—How many use the nokers without a veil? (Seven memrs hold up their hands.)

Q.—Will a colony cast an after farm with the last queen leaving the rent colony hopelessly queenless?

Mr. Alpaugh—I would say, Yes, once awhile, but not very frequently. I we had them do such a thing several less in my time. I have returned am four or five times with the young sen back into a colony, and they

came out, and they had no queen left, and yet the queen would go out with the swarm. I put her back, and she would do that time after time. I do not know the reason.

Mr. Timbers—Did you find that queen to be a good one?

Mr. Alpaugh—A good one, all right. The only reason I can give is that they must have decided to swarm, and you had interfered with their rules, and they carried out their own ideas regardless of what yours were.

Q.—How best to keep pollen out of sections and hive on starters?

Mr. Alpaugh—There is not much trouble in doing that. It does not say here how the sections are to be. If the sections are filled with foundation only, then you will not have much trouble. But if you hive on starters and partly drawn sections above, I don't know how you would do it. It does not say here what is going to be used.

Mr. Pettit—You have heard, I suppose, my advice. My method of keeping pollen out of the section is putting in one comb along with the starters, and using a queen excluder, which I consider a factor along with the pollen catcher.

Mr. Alpaugh—That is not hiving on starters.

Mr. Pettit—It is the next thing to it.
Mr. Sibbald—In hiving on starters if
you are going to put some sections that
have been used the year before it is
well to leave the bees on the foundation
for 24 hours before you put the supers
on. That gives them time to locate
their brood nest. Then you put sections in, and you will not have very

much trouble with pollen in them.

Q.—If extracted honey is desired, are not drawn combs best to hive swarms

Mr. Alpaugh—I would say certainly, if you have good combs to hive your swarms oh. There is nothing better

under the sun than good drawn combs for extracted honey. Hive on them every time if you have got them. If you have got combs all through so much the better.

Q.—Can any one cure an apiary of foul brood with formalin?

Mr. Alpaugh—I have not tried it, therefore I am not in a position to answer.

Mr. Sibbald—I spoke last year of formalin, but as there are isome present to-night who were not here then, I may say that I tried formalin very thoroughly, and it was not a success at all. The combs after being fumigated are not fit to use afterwards. The honey put in them will taste of it for years, and that alone is enough to condemn formalin.

Mr. Laing—I had a little experience along this line. I had three or four hives in Hamilton, and I thought I would try and find out something about it that might be of interest to beekeepers. Out of the four so far as I can see it has failed. One of them is certainly cured, but the other three are not. However, I have not given the thing up as lost. I have repeated the experiment again on the colonies, and I will be able to tell you better a year from now what the result is.

Q.—Is sugar syrup made by stirring sugar into cold water just as good to feed bees for winter stores as that brought to a boil?

Mr. Alpaugh—I am not in a position to answer. I fed my bees in that way by stirring sugar in cold water, but I have not gone through a winter with it.

Mr. Hall—It is better than boiled, as it never granulates.

Mr. Laing—It is certainly less trouble. I have been feeding my bees on syrup made from cold water and sugar for at least a dozen years, and there is not any difference whatever so far as the results are concerned. You san a wonderful amount of mussing of your stove, and wearing out of you patience.

Mr. Alpaugh—Whenever I have had any feeding to do I have always brough it to a boil, and if this is as good a the other I had a lot of unnecessary work.

Q.—Is there danger of dark how being carried from the broodnest to a sections?

Mr. Alpaugh—I would say, yes, a der certain conditions where there lots of dark honey in the brood and the queen has not yet taken and the possession or development in the bronest as much as she will do, and a haps cannot until some of the and honey is removed. They will always the place to put the honey. So it would say that there is a danger der certain conditions.

Mr. Holtermann—I know that to the case. I carried on some careful periments with stocks that had be wheat, and I watched them to see to the result was, and the buckwi honey was carried up, and it was possible for them to get it from other source than from the be chamber.

Q.—Will a virgin queen introli into a hive that has built its a cells remain, the old queen has been removed previously.

Mr. Alpaugh—I don't know. I had so little success in introducing gin queens where I have taken laying queens that I have practicated up to the thing.

Mr. Holtermann-What if the

Mr. Alpaugh—Well, sometimes can catch them that way. In the they will accept the queen, but ill swarm.
Q.—Is it ive a full r will get in

Mr. Alpaus n why he rt of his ci ould hold it ere is a po me out fir Mr. Holtern cumstances it is intend those that Ottawa I nd of mine old him, ar But if you will se vas guarde ection of th a particul r. Timbers after. It s the whol nd seller the whol tnows exac he can do . Holterma epresent or purchaser n and gives year, he is will not giv him the fa is judgmen Laing-Yo ou give th Holterman My staten

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You saw Q.—Is it wise for a bee-keeper to ussing a ive a full report of his crop, so that t of you will get into the hands of the deal-

have had Mr. Alpaugh—I do not see any reays brough a why he should not give a full reis good a ort of his crop. I do not see why we ould hold it back, trying to make out ere is a poor crop. It might as well me out first as last.

ark hom Mr. Holtermann-That depends upon nest to t cumstances. I do not know whether t is intended for a little side hint y, yes, v those that have done so or not. At re there Ottawa Exhibition I met an old brood ne nd of mine, and he asked me, and taken t old him, and it got into the public n the br ss. But if you will read that artio, and a you will see it is carefully worded. f the was guarded; saying that I was in will n ection of the country where we had y have a particularly good crop.

danger after. It seems to me that it es the wholesale man both the buythat we and seller to a certain extent. It exactly is the whole thing into his hands.
that be known exactly how much there is to see where can do what he likes with it.

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Laing—You do not mean to say you give them the exact figures? Holtermann—I would not say My statements were guarded. It think there is any harm in givow much you have either.

t if the Sibbald—The dealers will not oney up to its value until they etty certain about the crop. If to sell honey to a dealer, and ery uncertain about the crop, he fer you a low figure. He will

say, perhaps, I will give you six cents, but he is just taking that on speculation, and he is bound to be on the right side. But after he has a good knowledge of the situation, he will go in with confidence, and buy what honey he wants. I think it is better for the bee-keepers to be candid.

Q.—Why is it that the majority of the comb honey producers recommend the production of extracted honey?"

Mr. Alpaugh—I did not know they did so that I am not in a position to answer. That is news to me.

Mr. Pettit—I do not know whether that is a hit at me or not. I have been a producer of comb honey, and have had a measure of success in producing a good article and a good quantity of comb honey, but I have told different ones that I am firmly resolved that very shortly I will be through with comb honey.

Mr. Brown—I am contemplating producing some comb honey. All the beekeepers said to me, "if you want to produce honey let it be extracted honey, and if you want comb honey, buy it."

QUESTION DRAWER.

(In charge of Mr. W. J. Brown.)

Q.—What is the best fuel to use in a smoker?

Mr. Brown-Rotten wood, preferably black ash.

Mr. Lowey—I use pine bark thoroughly dried, that is second growth. It will burn for hours if you are careful with it.

Q.—What is the best-sized frame for comb honey production?

Mr. Brown—I would say the ordinary Langstroth frame for the production of comb honey. That is my experience. If the question had been extracted honey, I probably would have given a different answer.

Q.—Instead of uniting two weak colonies in the fall—colonies that were made weak by working, would it have been better to have united the two swarms when hiving them, and have them in a full-sized nive?

Mr. Brown—It would have been been better to have united them in swarming time than to have united them in the fall.

Mr. Pettit—I do not think that exactly answers the question. My experience in hiving swarms on starters for comb honey is that in the fall they are about a certain strength, no matter whether they were strong when they were hived or not, because it is three weeks before there is much brood, and the old bees die down to a certain strength, no matter whether they are strong when they were hived or not, because it is three weeks before there is much brood, and the old bees die down to a certain strength, anyway.

A Member—The reason I asked that question was, a man said to me, "Why not unite them, and give them a full-sized brood nest instead of hiving them separately?" That is one point. Why not have them in full-sized hive instead of a contracted brood nest.

Mr. Lowey—In about ten or twelve days I should give them more comb. If you leave them until they are full they will be very weak in bees. The queen will be ten days, or probably two weeks, in occupying those combs.

Q.—What is the best method of preventing after swarming?

Mr. Brown—Give sufficient room at the proper time. Have sufficient room for your bees until the honey flow is about taking place (with me until the white clover is about a week in bloom or perhaps five days); then add sufficient room, put on your supers according to the requirements of the bees and very little swarming will follow. But I see it is for after swarming. That is rather a different question. My method would be to remove the old colony and set the new one in its place. I remove the old colony to where I intend it to remain.

Mr. Pettit—It is just as well to g an extracting super to the parent st as soon as it swarms.

MEAD.

I wonder how many bee-keeper this country would have a good si of mead on hand should some this looking individual chance to drop one of these dusty, hot days and or a drink.

And yet, there is no other prof of the apiary that will yield one is the profit that will mead. Here are figures, see for yourself:

One quart honey

Five gallons water

Total

Retail 5 cents a pint, 40 pints \$1

Less

Profit on five gallons

To make: Put into a clean five gallons soft water. When add one quart pure honey. Boil g for one and a half hours, skimming ten. Empty into earthen vessel when blood warm pour into a cask. The bung should be put in lo If the cellar is warm, fermentation begin in from five to fifteen days ter fourteen days' fermentation, off into another cask, leaving the In the second cask fermentation be allowed to go on from ten to teen days. When the mead is cal that nothing more is heard in the close the bung. Allow thirty day the mead to clear, then draw of bottles, cork well and pack in It will effervesce in a few days strongly.

This is the honey mead of the cient Germans, who attributed hand great age to its use. It is lightfully cool and refreshing better and can be used in case of fever when wine and beer would be in the L. E. Gateley, Forth Smith, Managerican Bee-keeper.

RE-QUEE

[By G.

aving found the next w he ripe que aking them at home e of the West bees would cutting into aware that Each ce ally imbedd ding, cut to steboard thr t any dry number requ right-sized over all, the ind a rubber hole to keep so that the co the box is ox is marke ch cell is pl e box so tha the cells poi he box in m et in my s carried at in the bee-1

will emerg and I have om one to i here given, of a single adding is fa atting, for as keeps the cell or cell ise liable to killing the put back in centre one

RE-QUEENING OUT-YARD well to g COLONIES. parent st

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[By G. M. Doolittle.]

aving found the queen and killed the next work is to give them one he ripe queen-cells I have brought. aking them from the brooding colat home each one was placed in of the West cell-protectors, so that bees would not destroy the queen cutting into the cell before they aware that their old mother was Each cell-filled protector was

ally imbedded in a sheet of cotton ding, cut to fit into the bottom of steboard thread-box, easily obtaint any dry goods store. Having pints \$2 number required in the box, anright-sized sheet of wadding is over all, the cover to the box put nd a rubber cord sprung around whole to keep all in a secure posiso that the cells cannot roll around the box is handled. One end of ox is marked "top," and the base ch cell is placed toward this end e box so that I may always know the cells point down when carryhe box in my inside vest pocket, et in my shirt, where cells are s carried at all times except when in the bee-yard where they are

> ripe" cell is one from which the will emerge in from 20 to 30 and I have often carried such om one to twelve hours, in the here given, without the loss or of a single queen. In this work adding is far preferable to cotatting, for the glazing on the ig keeps the cotton from sticking cell or cell-protector, as it is ise liable to do.

killing the queen the frames put back in the hive, when two centre ones are pried apart so that the cell-protector will

go down just under the top-bar to the frame, when the frames are broughtback to place again, thus imbedding the protector in the comb so it is securely fastened there until removed by the apiarist. As this is the season of the year when the bees do most of their superseding of queens (it seems so natural to them), my loss in using this plan will not average more than one queen-cell out of 20 given. So small a loss will not pay for a special visit to the apiary to ascertain whether colonies so treated obtain laying queens or not-especially as the colony which will occasionally destroy a cell or kill the just-emerged virgin queen have brood of their own from which to rear a queen, so the loss is never very great should an occasional cell be destroyed. Of course, there is a chance that the young queen may be lost when going out to meet the drone, in which case that colony is doomed unless rescued by the apiarist. In such a case as this the observing apiarist will easily discover the loss by an outside diagnosis of such colonies at a later visit to the apiary. This re-queening at this time (July 24) is so easily done that there is no excuse for having poor queens at the out-aplary.

The reader may think that what is here given conflicts with what I have written in the past about allowing the bees to take care of the superseding of their queens themselves. With the small and contracted brood-chamber. I still hold that the bee will take care of that matter fully as well as the apiarist can; but with this system of working, and that with ten-frame Langstroth hives, a queen will lay nearly as many eggs in two years as she would under the contraction system in three or four years; so that any queen which is more than two years old is almost sure to be played out; therefore, I make it a practice with this plan to supersede all queens which are two

years old at this time, and in the way given above. This plan is one of strenuousness too, all the way through, by which we get a multitude of bees in the field at all times, during the honey harvests; and even when ordinary colonies are doing nothing or securing only a living, these rousing colonies are actually laying up stores. Last May, when the colonies as ordinarily worked were living only from hand to mouth, these big colonies at the out apiary actually laid up from 20 to 30 pounds of stores in the combs above their brood. And then when other colonies were working a very little or not at all in the section supers, these were completing their first 44 sections, and well at work in the second super of 44 above. Such work as this is enough to cause the queen to produce all the eggs in her ovaries in about two years; and as the work of superseding as given above is easily done, I think it well pays to kill any queens when two years old, and give a cell to the colony, unless it is a queen that has proven herself of extra value, when I would keep her to breed from the next year, should she live through.

A HANDFUL OF BEES IN THE FALL

In Southwest Texas a mere 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.

WARM WATER FOR BEES.

It has been very often noticed Europe that bees have a particular preference for the water or rather to juices that may be found around plot of manure. The question has often been raised why they take it in preference to clear water. It has been supposed that it is on account of salty quality, or perhaps because contains some nutritive substances the may help brood rearing. Mr. G. Gendhas made some experiments on the subject.

He began by fixing some containing water and some contain the aforesaid juice, placed them convenient places, baited the bees, but all without success. They went the manure pile. Investigation n it was found that small pools of j around the pile being exposed to sun, were quite warm; a thermo gave a temperature of 70° against temperature of 57°. That explained all. A warm drink is what they Another trough was fixed at a h place; and warmed up with a alcohol lamp, so as to maintain water at a temperature of about or more. The bees were baited course of time, that is, in a few they were taking the warm water gether, in place of the manure ! A trough of water at ordinary ter ature placed by the side of the water was practically ignered by bees,-L'Abeille Bourguignone. (To lated in "American Bee-keeper.")

Ill qualities are contagious as we disease; and the mind is at less much liable to infection as the both

If you are considering taking great risk on an investment, if you in doubt as to whether you can afford a certain thing or not, is over with your wife.