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## What to Say to Would-Be Bee-Keepers.-Bee-Keeping as a side Issue Not to be Recommended.

F. L. THOMPSON.

An extraordinarily good season near Denver, together with a scarcity of honey in most parts of the country, has caused many who know little or nothing of bee-keeping to turn to it with a view to profit. They do not realize that this is au exceptional season; they only see the results. Even in ordinary seasons, however, there seems to be a general impression
here that apiculture is wonderfully remunerative. "There's lots of money in bees, isn't there?"' is almost sure to be the query put, sooner or later, by my casual acquaintances, when they learu that I keep bees for a living. It is a mystery to me how this opinion has become so widespread. I have generally answered this in an off-hand way, as one will conversationally, for the sake of saying something, by saying that there is some profit in bees, but nothing extraordinary, and then it takes both capital and experience to get it out. But I am not sure that this off-hand answer, while it is true enough, is quite competent to create the right impression in the minds of these off-hand inquirers. It is apt, as off-hand conversational remarks are, to get itself remembered by its most striking portionthat there is some profit in bees; and the necessity for capital and experience is apt to be but slightly regarded; and the result of the true answer may be a false impression. People will think "Some profit in bees-hum-well, with a little capital, and a little experience, I can make a little profit too--and that's no less than I am doing at my present business. I'll try it." But a little experience is not enough to make bee-keeping pay in years of ordinary crops and ordinary prices of honey and supplies, and ordinary competition. A
little experience lets too many chances of saving money leak away, so that bee-keeping becomes inferior to other occupations on which the same amount of energy is expended with more ability. In other words, make bee-keeping a business, or don't go into it at all.
"But" says the reader who always remembers things "I read in a bee-journal not long ago that beekeeping as a business is too uncertain, and hence should not be made the sole dependence. So I shall be obliged to give my fruit-growing, or farming, as much attention as my bees, and I cannot make bee-keeping a business in the strict sense; I cannot make a specialty of it."

Now what shall we say to these people, the careless and the thoughtless ones? To the careless ones, those who are possibly no more than conversationally interested, but who make the general impression of bee-keeping what it is, by handing on what is said to them, had we not better say right out, and say with emphasis "There is nor much money in bee-keeping," putting that phrase first, and then continuing in an ordinary tone of voice, "for the amount of capital needed, and the amount of experience required to get average results from a given amount of capital, would pay just about as well in fruit-growing or gardening." Something of this sort seems to be necessary in order to correct the inordinately exaggerated ideas current. It is strictly true, and contains as much of the whole truth as your offhand conversational interlocutor can possibly be made to remember. If you try to tell him as much as you could safely say to a thoughtful quertioner, he will forget all except that there is money in bees.

But on the other hand I would suggest to those who are thought-
fully inclined that bee-keeping as a business has been somewhat indiscriminately run down. Bee-keeping is uncertain, sure. But if in the spring of 1896 , when with very few exceptions the bees for ten miles around Denver either perished or were rendered useless for that year, from an unknown cause, which has not happened before or since, I had had part of my bees twelve or fifteen miles from Denver instead of having them all nine miles from Denver, I'd have escaped with half the loss, and would have been farther ahead to-day, instead of wholly losing that year, and then working with other people's bees four years more, having no bees of my own again until the last year. Again, if in 1898 a person had had one apiary say six miles north of Muntrose, and another say six miles south of Delta (these towns being twentyfive miles apart), he would have had half a crop; but if all his bees had been near Delta, he would have obtained scarcely anything. Again, if a person had had one apiary in 1900 at Lupton, and another near Denver, he would have obtained about twice as great a crop as he would by having them all at Lupton. In fine, those who emphasize the uncertainty of bee-keeping as a business are not telling the whole truth. The uncertainty is greatly lessened by having one or more outyards at some distance away from the home yard and from each other. And when that uncertainty is lessened to the degree that it is by having several apiaries in different places, is bee-keeping a whit more uncertain in the long run than fruit-growing or farming in one place? I trow not. Hark, in your ear; if all beekeepers were specialists, their number would be so lessened that beepapers would either have to charge five dollars a year, like medical jour-
nals, as has been suggested, or go out of the business. It's an uncertainty of bee-journalism, you see, not of bee-keeping. Let the galled jade wince, our withers are unwrung.

Now let facts speak. The beavy producers at Denver and Montrose are almost all specialists. They depend on bee-keeping only for a living. There are just enough ex-ceptions-I think of four or fivein Colorado to emphasize the rule. Why is it? There can be but one reply: because, as a whole, specialty is more profitable for the average man than a mixtureof pursuits. Why is it more profitable?-there is a chance for theoretical discussion; but the fact remains that it is.

In this connection it is amusing to remember how a certain writer once proclaimed that if there was a single man, woman, or child in the United States who made a specialty of bee-keeping, he should hold up his hand. Pare bluffing, that. Of course it was successful. Bluffing generally is, else it would not be practiced. I believe just two held up their hands. Are we to conclude that there are just two beekeeping specialists in the United States? O you innocent readers of bee papers!

The majority of those who keep bees, here in Colorado as elsewhere, are not specialists. But that is not the point. If the majority of those who produce honey in quantity are found to make that their exclusive or main business, then "bee-keeping as a business" is not nearly so uncertain as these make out who call everyone a bee-keeper who keeps bees. Probably much of the false impression on this subject is due to the fact that outside of our own county, few of us know of those bee-keepers in other counties or states whose names never appear in
the bee-papers. There are a number of bee-keeping specialists in Colorado whose names are never known to more than their neighbors and the secretary of the state association. May this not be so in Eastern states as well? Judging from the discovery by the Review every now and then of a new owner of two or three hundred colonies, it would appear so. Now, do any considerable number of those who produce honey in quantity in the Eastern states make it their exclusive or main business? I don't know. But it is evident from what I do know that these editorial generalities that appear from time to time on beekeeping as a business have been throwing a certain quantity of dust in our eyes-how much, I don't know.

I don't know, but suspect, that Dr. Miller, of Marengo, has had something to do with writing or inspiring those editorials. At any rate. his case will do for an illustration. He has one or two out-apiaries, and has had failures for three years, I think, in succession. He ought to be justified, then, in asserting that bee-kecping as a business is, for him at least, mighty uncertain. But then, that could only follow for the locality of Marengo; a general statement could not be made without comparing a number of representative localities. Has that been done? If so, there is no sign of of it; just the conclusions are given, the "thus saith the editor" (or editorial writer) being held sufficient. Perhaps it is, in some things. In others, and this is one of them, the specific evidence would be preferred. Another thing that has always puzzled me is that Dr. Miller has no other visible means of support except bee-keeping, unless writing, and that cannot cut much figure. If it was too uncertain as a
business, he wouldn't be in it, making it practically his sole dependence. If he has been making the fat years feed the lean ones, even three of them at once, then beekeeping can not be said to be a failure as a special business even in his case. Let us have more light.

Apart, and yet connected in one way, from the question of profit in bee-keeping as a specialty, is that of the desirability, for those mainly interested, of having our ranks composed of specialists or non-specialists. If it pulls our profits down to compete with non-specialists, then it should be made a point with us to be informed on the question of whether specialty in bee-keeping pays better than non-specialty; because if it does, then we can with a clear conscience say to would-be non-specialists "Keep out. I advise you this for your own good as well as my own." If it does not, then we must grin and bear the pulling down of our profits as best we may, for it would not be honorable to do otherwise.

Now, I think specialty in beekeeping does pay better than to keep bees as a side issue. I also think that bee-keeping as a specialty no more than holds its own with other occupations. Obviously, then, I also think that the keeping of bees as a side issue does not pay, when compared with the results that might be obtained from putting the same capital, energy, and time into one's main business, whatever that may be. Therefore I can with a clear conscience say to the prospective beeowner '"Don't. Either make it a business, or keep out of it. I know it will be for my gain if you keep out, but I honestly think it will be for your gain too." This I would say from the standpoint of profit alone; but to the genuine amateur, to him who would keep a few colonies for
the love of the occupation, I would by all means extend a helping hand. His pleasure in the occupation is also a profit, and bars my right to advise on the score of profit.

Now, does this competition of non-specialists injure the trade of specialists? I have been taking it for granted, because it is so evidently true. But a few years ago a wellknown writer proclaimed that the farmer bee-keeper is our best friend, because his inferior product furnishes a standard to measure our superior product by, and we thereby get better prices than we would if all the honey in the market was superior, so that there would be nothing to compare it with. Plausible, isn't it? But it contains a fallacy just the same. It may be true if there were just enough of the inferior honey scattered around to furnish a standard of comparison, and no more. But there is more than enough, much more; and it is that buik of inferior honey which injures us. The buyers and commission men are always on the lookout for a lever to force down the price of honey, and do not neglect so excellent a chance; not they. "Why, I can get all the honey I want for so and so much less than you ask me,"that's the song, and a very old and well-worn song it is in this neck of the woods. If that writer should come to Denver, and either produce or deal in honey here, and promulgate that idea of the farmer beekeeper being our best friend, he would be considered by his coworkers to be a greener specimen than any farmer. Not only does the average farmer bee-keeper produce an inferior article, which of itself pulls down the price of the good honey, but even if he produced good honey he would not sell it for as much as it is worth, and he sells his inferior honey for less than it is
worth. He has other interests. His all is not staked on his honey crop. He will not go to much trouble to get a good price. He will not organize, as specialists do, in the West at least. (By the way, the writer referred to has always talked against organization to sell honey.) He loses more honey, in the shape of runaway swarms, than he gets as surplus, and you can't teach him any better. In short, as a beekeeper, he does not profit himself, and he isn't wanted.

Denver, Colo.

## An Interesting Problem.

## S. E. MILLER.

Do the worker bees withhold from the queen egg-producing food, when they contemplate swarming? The above is a question that has propounded itself to me from a circumstance which occurred last summer, and the more 1 have thought over the matter, the more I have come to the conclusion that they do. I am sorry that a written record of this particular case was not correctly kept. In fact, I thought I had recorded all the freaks of this nucleus; but upon examination I found I had not, and will therefore give it from memory.

A two-frame nucleus, not very strong, having by some mishap lost their queen, a good laying queen was given them, and accepted. She laid fairly well for awhile; in fact, supplied all the eggs that the bees could care for; then she almost quit laying and soon they swarmed out. They were returned and given a frame of brood, but the queen did not take to laying as she should have done, and looked small and thin, like a virgin. Soon they swarmed again, and settled high up on a small limb of a walnut tree.
shot the limb off and succeeded in finding the queen on the ground where the swarm fell. I clipped the queen and hived them on a different stand, but in a day or two I heard a convention in the apiary, and on going there, found my same little swarm in the air. In looking around, I found the queen on the ground some yards from her hive. I caged her, and hung the cage to a lower limb of a tree, and went about my work. At first they started to settle on the cage, but afterwards deserted it and commenced settling elsewhere; but I paid no attention to them; I went on digging potatoes some little distance from the apiary. Some 3 or 4 hours later, I came around and found them settled quietly on the cage, and by some means they had recruited others until the swarm was about twice its original size. I then hived them in the hive they came from, and added a frame or two of brood. By allowing them to remain hanging up some 3 or 4 bours, they seemed to think they had accomplished the desired effect, and went to work. The queen commenced laying and developed to a fair size, and has since been laying all the eggs the bees are able to care for.

Now why did that queen remain small and lay very few or no eggs during this swarming mania? Did she wilfully refuse to lay or did the worker bees refuse to supply her with the necessary egg-producing food?

I am inclined to the latter theory; for when the bees were once satisfied to remain in the quarters assigned to them, the queen soon commenced laying. At one time when they swarmed, I had the queen caged for a short time, and upon releasing her, they immediately balled her, and I had to cage her and introduce her again. This balling, I
think, was because the queen did not enter into the spirit of swarming as the workers desired.

Is it not possible, then, that where bees contemplate swarming, they withhold from the queen the necessary egg-producing food? And the question then arises, Is there any such food? or, if so, does it differ in any way from the food supplied the larva intended to produce workers? I am inclined to the belief that if we properly understood the food problem, we would find that the nurse bees prepare various kinds of food for different purposes, and that the variation is greater than we at present have any idea of.

Here, I think, is a field for investigation for some of the more scientific bee-keepers, who have the patience and resources for studying the problem, How many different kinds of food are used in the hive? and What are the different chemical compositions?

Bluffton, Mo.

## A Chapter on Traps.

## W. H. RITTER.

After a man gets into the sixties, he does not appreciate climbing after runaway swarms, especially if he has to climb thirty feet, as I have had to do to get them down from tall oaks that grow in my yard.

In order to leave the climbing out, I had to resort to traps. I have had a varied experience of twelve years with queen traps, and it has not been altogether satisfactory, but it beats clipping or climbing.

I have eight hives that I have kept from swarming for two years by the use of a queen guard, made the same form and size of the ordinary queen trap, but without any inside to it, so the queen cannot get out during swarming time. She
can only follow the swarm out of the hive into the veranda. There she has a space open enough to cool off in, but she can't get out; she can loaf till the swarm gets tired or comes back. Then if there is lots of clover, they just give up swarming and go to piling up the honey.

Some of the books say that if the queen cannot get out the bees will kill her and raise a new one, or fail and become queenless. Well, maybe this might happen once in a long while, but I had no such trouble with my eight hives thus treated for two years, and, as a matter of fact, everybody knows that a colony that never swarms is the one that makes the big honey crops. Other hives that I used traps on and hived the first swarm only, and then plugged up the entrance to the upper part; the trap was then a trap no longer, but a queen guard. If any second swarm then came out, I paid no attention to it, as the queen can go back into the hive at her pleasure. which she will do as soon as the swarm returns.

I am using a trap something after the form of the late Alley trap, but with an improved cone for the entrance of her queenship into the upper story. Instead of three cones in the center of middle division, there is a narrow lane three inches wide and high enough to come over half way to the top of trap. This is secured into a notch $\frac{3}{8}$ inch by three inches long, cut in the front edge of the middle board of trap. This starts at the zinc front, and leans in at the top. As the queen and drones, at the swarming, run up the zinc front, they strike the middle division of the trap immediately at the entrance lane, and go straight up into the trap. This is quite an improvement, as it sometimes happens that a queen will not find the cones out from the edge or
front. This lane needs only to be sufficiently wide enough for the largest drones to pass up without getting fast, and three inches wide, and high enough to come above the middle of the upper story, and should lean out from the zinc half an inch at the top. It is best made of some wire cloth, same as used for the cone.

There is just one more thing to say about traps, and that is a word of caution. They should never be left on more than three days at a time, without being taken off and well-cleaned of drones. If left on three or four weeks, they will get full of dead drones, and that will be dangerous to the health of the colony. No kind of queen-trap is safe unless cleaned often. It is best done about daylight in the morning, as fewer bees will then be in the way.

Springfield, Mo.

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Untested, April, May and June, $\$ 1.00$ each; $\$ 11.60$ per doz. After June, 50 c each: $\$ 5.00$ per doz.. .. Tested, one-half more. Breeding Queens, $\$ 3.00$ and $\$ 5.00$ each.......

## White Piymouth Rocks Cocks.

$\$ 1.00$ each. Eggs from 94 scoring birds $@ \$ 1.00$ per 15.
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The American Bee-Keeper opens up its January number with an arti-
cle on unpainted hives, by Arthur C. Miller, in which he objects to unpainted hives for three reasons:
"For three reasons I object to unpainted hives: First appearance; second, economy; third, condition of bees. Generally speaking, unpainted hives go with unpainted buildings, shabby fences, farm implements, etc., etc., and I have almost invariably found where the hives were unpainted, that man did but indifferently with his bees; in a word, he was "slipshod" in all his work. (I do not imply thst Mr. Doolittle is). Well-painted hives encourage an orderly apiary, and that helps to maintain a spirit of neatness and care in everything pertaining to the business; and if the cons ${ }^{\dagger}$ ant insistence on this by apicultural writers and honey dealers is any criterion by which to judge, there is certainly need of wider practice of these virtues. As to the economy, I maintain that a coat of thin paint each fa!l is far cheaper than a new hive every little while-I cannot say how often, for I gave up the unpainted business before my hives had a chance to deteriorate much. Beside the saving of the hive, there is the economy of stores and vital force of the bees; and this brings us to the third phase of the question. Mr. Doolittle's position is that by leaving the pores of the wood open, the moisture from the bees will pass out (with mine it alL goes out the FRONT DOOR), but he does not say where the rain and water from melted snow will puss to from these same pores when they become filled with it. Let him put on an overcoat, and sit out in a good, cold rain, and see where the moisture goes, and how warm it is inside of it. Then let him try a dry coat and a rubber coat over it, and report. He will not feel any moisture inside the rubber coat unless he is exercising rapidly."

## Further on he reminds us that

"If they are properly protected and have been in the bive long enough to varnish the inner surface of it so no moisture can get into the pores of the wood from that side, they will be found to have dry combs and to be in a healthy condition in the spring."

## And again:

"One of the early operations of the bees in a new home, be it a box, a straw hive, or a hollow tree, is to thoroughly varnish the interior, and when they have a box fixed to their liking it will be as tight as a tin can."

This being the case, what about either air or moisture passing in ei-
ther direction, inward or outward? Neither pass very readily through a tin can. And what's to prevent the utilization of this home manufactured product in the varnishing of the outside of the hives?

Doolittle in his article on "Qualifying for an Apiarist," says he learned his A B C in Bee Culture in the writings of L. L. Langstroth, Moses Quinby, E. Gallup, A. I. Root, Adam Grimm, and others, and as good as says, "Go thou and do likewise." He also suggests that through the medium of visiting, and our conventions, which is but another name for general visiting, we may secure knowledge from many of our more practical bee-keepers, who do not write for publication, and that, too, of a value which would make good all cost. He concludes this article as follows:

[^1]Here is a selection from the Ca nadian Bee Journal, on the "Utter Foolishness," which, by the way, but for ready and determined action, might have turned out to be anything but foolishness to bee-keepers:

[^2]getting down to first principles. The Utter absurdity of the plaintiff's claims were made apparent to all observers, after the gentleman from Chapinville had made "Marks" of his witnesses, by proving to the jury that in their claims that bees puncture peaches they were simply "talking through their hats." And now that it has been judicially settled, that the claims of the plaintiff were too Utter, I think, writes Orel L. Hershiser, we are justified in believing that peace will reign in Amity again."

My good friends, if you've not already investigated the proceedings of this suit, which started in a comparatively unknown village, only a brotherly affair, but which so rapidly grew into national importance, you should at once enlighten yourself. It actually developed at one time that the bees of York state have horns. Next thing we may expect that they will be offering for sale superior queens of this celebrated horned variety. Beware! if they are as active in the use of these appendages as represented, we want none of them.

The January Progressive, the longer it tarried, the more anxious we became. Its tardiness but served to emphasize its value. But when it did arrive. oh, but didn't it make up for lost time? One needed not to be gifted with clairvoyance to enable them to prophesy success for Will Ward, however. Thus far, there's nothing to retract.

On page 8, F. L. Thompson relates that

[^3]evident that when Mr. Gill refers to a beekeeper, he means 1 man, 1 woman, and 3 children. I solemnly protest against any such misleading assumptions."

He protests from one point of view, and justly protests, that of misleading, as to the amount of work it is possible to accomplish. There's still another thought that might be brought out in this connection, that is, give credit to whom it is due. If health, wealth, fame, prosperity or what not is in any degree due to efforts put forth by wife or children, be kind enough to recognize the fact by at least a free use of the pronoun "we." "Variety is the spice of life." Try leaving out a few of those capital I's, and insert instead a few "we's," and note the effect. Doubtless he who may casually glance over this, may have formed the acquaintance of the man or men who seemed happily ignorant of the existence of the humble word "we." Its praises cannot be too highly extolled, while the indiscriminate use of "I" has bred many a discouragement which was but the beginning of a downward career.

I cannot understand why some good woman does not help that old bachelor, Eversole, to say "we." Looks as if it might prove a mutual benefit association. He seems amply able to take care of a woman, and why should not she in turn be amply able to take care of him?
H. H. Hyde regards the improvement of stock the paramount issue. The leading points to be considered he places in the following order:

[^4]That he is a practical bee-keeper, none will question when they discover that he places beauty last on the list. Says he has no kick com-
ing against beautiful bees, but he has received some "that were not worth the postage put on the cages of the queens." Whereupon I fell to wondering why is it that men are not equally careful in the selection of the queens of their household? With many, beauty not only seems to be first on the list of requirements, but is the first, last and only thing worthy of a thought. The world seems rapidly approaching the place where to say of a woman, "her face is her fortune," is to pay her the highest conceivable compliment. Who can fail to realize that beauty of form or face is as evanescent as the morning dew? And, having made such choice, whom can he expect to mourn with him when his idol shall have been shattered into atoms or melted into dross? From whom could a bee-keeper expect sympathy, were he to choose for beauty and fall short of a honey crop? His most frequent greeting would be a smile of contempt.

Friend Will Ward, what waked you up to say:
"We would respectfully suggest that there
is enough of interest for bee-keepers to write
about without continually criticising others. Such always smacks of petty spite."

That is certainly well said. As to those strained eyes, Sommy, being a fellow-sufferer, feels capable of extending heartfelt sympathy.

Dooolittle's instructions on winter feeding will prove seasonable reading to many, if we may judge from remarks quite frequently addressed to us, such as "I fear all my bees are going to die," and similar expressions, but it does seem that the discovery of such conditions in January or February is a little out of season. Such folks remind me of Pat, who liked the making of maple sugar so well he proposed to "follow it the year round." Most of the honey raisers are only too
glad to shut down the winter feeding during the last days of September or the first of October, and with everything "as snug as a bug in a rug," they can then draw a few breaths of freedom until the next "spring's opening." That grand event, the "spring opening," is near at hand, and he who stood by his bees last fall will now find himself amply rewarded. Instead of being possessed of a nervous dread, he is hopefully anxious for the beginning of the new season.

A few paragraphs culled from December's American Bee-Keeper fit in now:
"An abundant yield of nectar in the flowers availeth nothing without bees to gather it. The extent of the working force depends more largely upon the prolificacy of the queen than upon all else...If a queen is found to be incapable of keeping her colony up to the standard, pinch her and turn the combs over to a queen that will make profitable use of them.... In considering the merits of stock, color should be the last to receive attention. "Handsome is that handsome does," very fittingly expresses the matter. "Beauty is but skin deep.".... Do not condemn a queen because some or all the workers which accompany her through the mails are not marked according to your liking. They may be no relation to her. All cheapqueens are not inferior, but facilities and care necessary for ,the production of good queens are expensive."

This string of "Don'ts," furnished the same paper by C. C. Miller, is also timely:
"Don't think you can raise queens in the winter. Don't try to start queen-cells much in advance of the time when bees begin to start them from swarming. Don't think that a thimble full of bees can start good queencells. Don't be satisfied to rear queen-cells from anything but the best stock obtainable. Don't be satisfied to let the drones take care of themselves without suppressing them in all but the very best colonies. Don't allow your nuclei to stand without brood so as to start laying workers. Don't take a queen from a nucleus until she has laid enough eggs to establish a fair reputation as a layer. Don't give a cell to a nucleus until it is near hatching, especially if weather is cool. Don't hesitate to smash remorselessly any queen that don't come up to your standard. Don't set your standard too low. Don't fail to recognize that the queen is the main thing in beekeeping. Don't think that in thirty days you can learn as much about queen-rearing as Doolittle did in thirty years. Don't think that if you don't do any of the above-mentioned things, you don't need to be on the lookout for some other foolish thing."

Such admonitions and cautions would seem to indicate that the opportunity of securing a honey crop lies somewhat within the bee-keeper himself. Not so very different from other occupations, and all in the face of the rather popular belief that it costs nothing whatever to raise a honey crop. Oh, no; the little bees just carry it in from the neighbors' fields, while the happy-go-easy bee-keeper swings in the hammock. Ha, ha!

Naptown, Dreamland.

## The Sure Hatch

is a high grade incubator at a low price. Thousands in use. California red-wood cases and copper tank incubators at the price others ask for common pine and galvanized iron. Our brooder broods as well as our hatcher hatches. Handsome catalog giving plans for practical poultry houses, yards, etc., free. li rite to-day. You need it in your poultry business.

Sure Hatch Incubator Coag Clay Center, Neb.
We pay the freight. The Sure Hatch will pay your rent, taxes, and living expenses. Thousands in use, thousands of pleased customers.

(This story began in the December issue,)
Now this kindness and generosity was about to be repaid with double interest, as the groom grasped the situation in an instant, and assuming a conciliatory attitude as though the glittering gold had loosened his tongue, he proceeded to answer these questions in detail, and so adroitly concealing all facts that would be of use to the would be abductor; the stranger at first showed considerable surprise, evidently not expecting to find a groom with such conversational powers, but with the ability that many stage actors would have envied, his face assumed an expectant expression, and he awaited with patience the groom's tale of security debts bankrupting the best man in Italy; the estrangement caused between father and daughter, on account of the scanty allowance she was forced to put up with, and the constant demands made on Count B. by the creditors of those who had heguiled so noble a man and benefactor of his countrymen into endorsing for them; tears even gathering in his eyes as he recited this distressing piece of information, which was followed by the advice to seek a more profitable field on his hunt for fortune. The bandit's face was now a study for a mind reader, and totally non-plussed the groom. It was but for a moment, for the bandit quickly answered:
"I will take your advice and start in the lucrative theatrical business, and I want you as my chief actor."
The groom was surprised at this unexpected turn, not knowing what to expect next, but he saw that the bandit suspected him, and although these
thoughts were as quick as lightning almost, they were scarcely as fast as his questioner's action, which was as quick as the stroke of a viper. His right hand clutching the throat of the unsuspecting groom, bore him to the earth, and with the assistance of his accomplice, soon had the groom bound hand and foot. Then the vice-like grip released the poor groom's throat, and allowed him to breathe a few gasps, when a gag was thrust into his mouth, and he was roughly dragged to the gulch in which Lady Ginevra found him, and mercilessly rolled in. A few words hastily spoken, sent the accomplice towards the rocky road leading to the main thoroughfare, and soon the groom heard the rearing and plunging of Black Beauty, and realized the fact that the bandit was trying to steal the valuable animal. Trying hard to free himself, he found that he was most securely bound by expert hands, who evidently had become accomplished in this art by much practice.

His position was painful, and by herculean efforts he managed to roll himself over, assuming a more comfortable pusition, and, for all he knew, one in which to die, as he could neither cry for help nor loosen his bonds. Already his wrists and ankles were beginning to swell, and to pain him, so tightly the cords were drawn. The only consolation he had was that from his knowledge of the horse, and the lunges he was making, be felt confident that the bandit could not manage him, and hoped -that Lady Ginevra would dfscover him and raise the alarm. The bandit tried alternately abuse and petting, to subdue the animal, but of no avail.

Suddenly there came a sound of many steel-shod hoofs, as though the riders were racing on the hard thoroughfare. The plunges of Black Beauty ceased, and hurried footsteps betrayed a hasty retreat to the rocky cliffs, from which the bandit and his companions had come. Soon the sound of the riders
died away in the distance, and the rearing and plunging of the horse announced the return of the bandit. Seemingly in a short time after this, to the groom's dismay, he heard the voice of Lady Ginevra, and the conversation that occurred between the bandit and the fair girl, during which he heard a distant sound as of horsemen, but too indistinct to determine its course or nature. The bandit evidently heard this more distinctly, which explains his hasty departure in the boat, and following the side of the lake next the cliffs where it was difficult for horses to travel.

As quick as possible, after Lady Ginevra left, the groom and maid gathered up the fish, hurried to the chaise, and followed. Suddenly turning the corner, where the fiery animal had almost dashed the life out of the bandit, the chaise was brought to so sudden a stop as to almost unseat the occupants, who were horrified to see the prostrate form of the bandit lying in the road, vainly trying to crawl away. The groom, giving the reins to the maid, went to him, and removed him to the shade of a large boulder, and placed him in as comfortable a position as he could. The wounded man motioned him to lower his ear so he could speak to him; as he did so, his quick eye caught the flash of a bright dagger, and he sprang back just in time to avoid a savage lunge made at his breast by the wounded man, who in plain Italian remarked, "Tell no tales." Seeing he had missed his mark, be threw the dagger at the groom, who barely had time to dodge it, so unexpected was the attempt on his life. Picking up the dagger, he resurred his seat in the chaise, and drove hurriedly away with the almost hysterical maid. As he reached the Napoleonic road, where the chaise made less noise, he distinctly heard horses' feet coming at a rapid gait; looking over bis shoulder he saw balf a dozen mounted soldiers riding fu-
riously and waving at him; reining up his horse he awaited them.

The leader, a slender, wiry-looking man of probably forty summers, with keen gray eyes and broad forehead, asked who he was, where had he been. and whom had be seen on his route? In as few words as possible, he told of his late experience with the bandits, giving all the particulars, which the leader seemed to note down in his memorandum as fast as the groom could talk. The mention of the wounded bandit by the roadside caused a pause, and with a wave of the hand he said, "Vallejo! Berdino!" whereupon two stalwart, heavily armed soldiers turned their horses into the narrow road and hastened to secure the wounded bandit.

After having given all the information he had, Van handed the dagger to the leader, who seized it eagerly, and carefully scrutinized it; with a scarcely perceptible expression of pleasure flitting over his face, he carelessly remarked, "You did well to escape that cowardly attempt on your life." He tore a leaf from his notebook, on which he was writing in some kind of pothook looking characters, while talking, enclosed it in an envelope, affixed his seal, and handed it to one of the soldiers, with a few words spoken in a foreign tongue. The policeman, with a salute, was off.like a shot toward the city. The dagger was carefully wrapped, and put in the chief's saddle-pocket, and securely strapped. Thanking the groom, he permitted him to resume his journey home, The soldiers rode off in the direction taken by the detail who went to look after the wounded bandit. The groom hastened to the mansion, eager to know of the safe arrival of Lady Ginovra, and was rejoiced to see Black Beauty quietly grazing near the mansion, and, later, to see Lady Ginevra appear on the veranda. After the information was imparted to the excited girl, the groom assured ber that, judging from the appearance of
the soldiers and their leader, no highwaymen would risk themselves in so public a place for many days, as it would be decidedly uncomfortable to have such huntsmen on their track.

It was late in the afternoon when Count B. returned home from Florence, and hearing this strange piece of news, was greatly distressed at the thought that his lovely daughter could not roam at will over his broad estate without fear of some bidden enemy suddenly overpowering and abducting her, and forcing bim to ransom her, but tried as far as possible to treat the matter as an idle threat of some imaginary scamp who would not dare execute his nefarious plot; but advised his daughter, as a safe-guard, to be cautious, and remain about the mansion until he could more fully investigate the matter. After tea, as was his custom, he took a stroll through the grounds, finally stopping at Black Beauty's stable, where he found the groom just fitting a huge iron bar across the door. On being questioned, he stated that he feared an attempt might be made to steal him, although it was doubtful as to whether a stranger could manage him; yet he thought it advisable to give any wouldbe thief all the trouble possible to get to the horse and let the horse furnish the balance.
"That he is very likely to do," added Count B. "He is a wonderful animal. His sire and dam were the fastest animals that ever pressed ltalian soil, perfectly kind with those they were accustomed to, but devils incarnate with strangers."
"Black Beauty is a chip off the old block, only magnified several times; as kind as a kitten with Lady Ginevra and myself; but you ought to have seen him today;" and the groom proceeded to give Count B. a detailed account of everything that had happened. The Count listened attentively with a grave troubled face, and asked:
'Can you describe this bold bandit?

Was there anything peculiar in his make-up?"
"Yes, my lord. He was of medium height, of strong, muscular build, no surplus flesb, dark complexion, small black eyes, jet-black hair: regular. white teeth; short, black mustache; a long scar above his left eye, and one at the back of his right ear. I noticed the scars when his hat fell off, as they dragged me to the gulch."
"Now, Van, can you describe the man who seemed to be the leader of the soldiers?"
"Yes, my lord," and he gave the description. This seemed to please Count B., but he made no remarks as to the chief, but informed his trusted groom that the bandit's description corresponded with that of Don Juan d Castillo, a half-breed Spaniard and Italian, who had given much trouble near the Great St. Bernard Pass, sometimes over in France, next in the mountain fastnesses of Switzerland, then in Italy.
"He is bold, daring and unscrupulous, and would have killed you, but hoped to capture my daughter on her return to land, conceal her in the mountains, and send you to me with a demand for ransom money. Thanks to the mounted soldiers, the sound of their horses' feet caught his alert ear, and he hurried off with his gallant promise. Well, we will see if his call cannot be made interesting. I will appoint you chief of my guard, and have you select me twenty-five of the hardiest, most fearless, and best riders you can find; arm them with the arms that I will provide, secretly, and have them kept concealed. Select the very fastest horses on my estate, excepting, of course, my two saddlers and Black Beauty. Take my pack of dogs, and clear that gang of wolves out of the forest beyond the mountain cave. Begin slowly, at first, and increase your work gradually, so as to toughen men and horses. Select none but our own men, whom you know to be trust-
worthy. You know them well. Tell them the work is dangerous and that some lives may be sacrificed; but there are thousands of those wolves, and they continue to increase, and we are going to rid the country of them. Bear in mind, we are toughening good men and horses.".
"All shall be done just as you have ordered, my lord," replied the groom, feeling honored at having this new duty imposed on him, Count B. walked leisurely around the buildings awhile, and then returned to the mansion. Van remarked to himself:
"Oh, yes! toughen them up to hunt wolves,-eh? Well, I guess they will think they are straps of whitleather by the time the moon changes again. Why, they are almost that now. Count B. doesn't know that during my leisure, I have a private school, teaching horsemanship, and have exactly the twenty-five very fellows he wants. Well, I will just say, we have a big holiday, and a pleasant, dangerous task to clean out those pestiferous wolves; and the fact that they killed those two children yesterday will give us an excellent excuse to toughen these boys, without exciting suspicion; and one of these fine, large days, the wolves we are after will only have two legs; but I will be careful not to think this aloud. Four legged wolves with long teeth for the present. Say, Black Beauty: You need not point that ear at me, you did not hear me thinking, I know, if you did give that two-legged wolf his first lesson to-day." With this remark, the bar was made secure by a huge lock, and Van was off to notify his riding school to assemble at their usual ground at eight o'clock the following morning, and he would give them something interesting in the riding line.

Promptly, at the hour mentioned, all were there, and the select horses brought out. Van calling them around him, told them, that he had a holiday, and permission to take the pack of dogs
and have a wolf hunt, asking how many wanted to go. All assented in chorus and Van asked as to arms, and found that they could collect a fair supply suitable for the chase. So the dogs were freed, and soon they were off as merrily as a lot of school boys, just released to go on a skating frolic. The forest was soon reached, and the chase was opened, which soon attractthe attention of many living in that vicinity, some of the older ones remarking that it was Count Berberini's pack, and that doubtless he had heard of the wolves destroying the two children, and, just like him, he was going to give them a lesson. Soon, some of the horsemen passed at break-neck speed, with Van in the lead, and it soon spread that, "Count Berberini is after the wolves." The men and horses stood a hard day's work finely, and were rewarded by carrying hundreds of wolf scalps back, as trophies. Next morning they were ready, as fresh as ever, and eager for more fun, although several had made narrow escapes the day before, having their clothing badly torn by the ferocious beasts. Van had selected a keen dagger and polished lance for each horeman, from the Count's armory, so that all were now well prepared for emergencies and rode off in high glee.

It was hard to decide which were the happier, the men, or the dogs; both worked courageously and soon the wolves were either all killed or had hied themselves away to the mountains. So proficient did these lancers become. that many wolves were impaled while the rider was following at a furious gallop. When Van reported their success, and accomplishments, the count was both pleased and astonished.

Van was requested to find some method to keep them in training, and agree on a signal that would call them to him, armed and mounted when needed; which was promptly done, and all awaited expectantly, wondering what was to be done next. They were not destined to wait long.
[To be continued].


LEAHY MFG. CO. Higginsville, Mo.

## An April Medley.

ARTHUR C. MILLER.
Have you any weak colonies this spring? What are you going to do with them? Try uniting them with the strong, first killing the queen of the weak ones. You will find it much better than trying to build them up.

Are you going to clip the wings of your queens this season? If not, why not? It is convenient in many ways. Swarms do not take away your valuable queens to enrich some stranger, nor will they swing from the top of some tall tree and hum to you of the times that
are past. Then, too, it is a very handy way of marking queens; a different cut from one or more of the four wings gives you at a glance the age of every queen.

Are you going to raise your own queens? How? Try the different plans till you find the one the best suited to your wants. And do not forget to try Alley's plan again. Its age is not against it, and it may just meet your requirements. Whether you rear your own queens or permit the bees to have their own sweet will, look carefully after the drones. Devote one or more colonies exclusively to rearing them; it will pay you. If you have no frames filled with drone comb, get some, and then paint the top bar of those frames a brilliant red; thereby you can find them easily, no matter where they are distributed.

What do you know about introducing queens? Can you do it successfully nine times out of ten? If not, then try until you can. Try Simmins' "fasting method"; it is good.

Will you allow natural swarms, try to prevent swarming, or make them artificially? If the first, what system of treatment is best in your locality? If the second, take careful note of all the conditions and report the result. Bet you can't note all the conditions, at least not on the first, no, nor on the tenth trial. If you would practice artiticial swarming, try Stachelhausen's was; it is good, IF you know the conditions of your locality and of the colonies under treatment.

And, above all things, keep your eyes wide open, and not only look, but learn to see. If there is any class of people who seem prone to only half observe and to jump at conclusions, it is the bee-keepers. Mr. Doolittle is one of the few shining exceptions to this rule, and even
he sometimes stumbles over crossing "Nature's way." This lack of thorough observation is not that bee-keepers are less intelligent or more careless than other people, but because the nature of the industry is such that very many things have to be taken into consideration. There is, first,. "locality": this means climate and flora; second, "condition of colony": this embraces age and vigor of queen, quantity of bees, relative proportion of young and old, amount of brood sealed and unsealed, and stores on hand; third, honey-flow, present or to come. All these and many more subtle things call for the keenest kind of observation. If we are to get onto anything like a certain commercial basis, or make it a truly

progressive and lasting hobby for the amateur, we have got to know a lot of things which today are only guessed at. We have got to follow Doolittle's way, and excel him at it.

Providence, K. I.

## State Bee Inspection.

J. W. ROUSE.

Not Iong since, a leading lawyer of our town informed us that a bill had been introduced in our legislature at Jefferson City to make provisions for a bee inspector for Missouri, and he seemed to think it was rather a huge joke, in that it was aimed to make a place for somebody for an office; also he thought it was rather interfering with the rights of bee-keepers in having their bees inspected, whether they should want them inspected or not. He was surprised when I explained the case to him. He stated to me that he thought that it was interfering with the rights of others for a beeinspector to come to one's place to inspect his bees, but I told him it might be said the same thing for a board of health to come to one's place to find if there was any contagious disease, such as smallpox, ete., and that it would make no difference with the board of health whether anyone wanted them to inspect or not. They did so anyway, at pleasure. This seemed to give him some light, as he then asked if bees ever had contagious diseases. When we informed him that bees did sometimes have contagious diseases among them, such as foul brood, black brood, ete., and that if not checked it would not only kill off all the bees in one's own yard, but was very likely to be carried to other yards, and thus destroy all the bees, in time, if not checked, he began to see some wisdom in the appointment
of a bee-inspector; then when I showed him the need of bees to the successful growing of fruit, he could see the importance of the care of the bees. We then loaned him some bee literature in regard to bee inspection; also in regard to bees and fruit, and he seemed pleased and interested to get the information.

I was informed a few years back, by the president of our state horticultural society, that the fruit interest of Missouri then amounted to $\$ 20,000,000$. If it was so large then, it must be over $\$ 25,000,000$ by this time, as there has been a large increase in acreage of fruit trees in the last few years, and the bees, as are acknowledged by all leading horticulturists, are great helps in the successful growing of fruit, in causing cross-fertilization during fruit bloom.

I told this lawyer that I wanted him to post up some; that while I hoped that bee-keepers would never need the services of a lawyer in Missouri, yet through ignorance of some, of the rights of bee-keepers, and the help of bees to fruit-growers, that we might need the services of a lawyer.

I believe that bee-keepers everywhere should give out all information they can on this subject, not only to lawyers, but to everyone, and by people being informed on this subject, would break down prejudice, and in some cases at least prevent law-suits.

Some of our northern states have bee inspectors, and some even have as many as four, and it seems necessary to do all the work that is required; and I think if all persons holding appointments would come as near earning their salary as do bee-inspectors, that much more would be done by many holding appointments. As I understand the matter, in most states where they
have a bee inspector, an appropriation is set aside for this purpose, and the inspector only draws pay for services rendered.

Mexico, Mo.


## Our Paper

 for 10c a Year. N $\mathbb{F}^{s}$ an experiment, we are goregular 35c a year Poultry, Bee \& Fruit Journal to all who subscribe before July 1, an entire year for TEN CENTS. Every one can afford this small sum and we should secure sever thousand new readers before July 1st. Send your dime today and get four of your neighbors to send with you and we will make you a present of a good poultry book. You will be pleased, as we try to make every issue worth the regular subscription price. Send today to the
## Poultry Bee \& Fruit Journal, Davenport, Iowa

## The Amateur Bee-Keeper



[^5]
## Way to Make Vinegar and Introduce 0.ueens.

by L. L. SKAGGS.

Southland Queen.
I will tell your readers how I make honey-vinegar of about twice the strength of ordinary vinegar. Get a good vinegar barrel, or any good oak barrel, knock out the head and use domestic for cover. Cord the cover on tight with fish cord, so that nothing can get in but air. Put in about $2 \frac{1}{2} \mathrm{lbs}$. of honey to the gallon of water. Don't ever mix any yeast or anything else with it. Just keep it in the hottest room you have till it gets clear and so strong that no one can drink one tablespoonful at once. Don't do as I did the first I tried to make. I concluded it was spoiled and poured it out. When it gets bitter and tastes like all the mean things you ever did taste, then it is making vinegar. Just let it alone till it gets clear, not like water, but like brandy. The main things are a large vessel, plenty of air in the vessel, not in the house, and the hottest house you can make. Black sheet iron is just the thing to cover the house with.

I will now give my way of introducing queens, by which I never lost a queen, and I don't believe there will be one in one hundred killed. Just as soon as you get the new queen kill the old one. Sometimes there are two queens in one hive. The sure way to get them is to put a new hive in place of old one, fasten a queen-excluding en-trance-guard over the entrance, shake all the bees in front of the hive and place the frames in the new hive. Be sure the queen don't get in at the top. Hang the cage with new queen in the middle of brood-nest, leaving the wire cloth so the bees can get to it. Let the stopper, or cover, which covers the
candy, remain. Be sure the bees can't get to the candy. Let it remain for three days, then remove the stopper, or cover, from the candy. Don't molest the wire cloth that covers the face of cage; just the stopper that covers the hole in in the end of cage. Put the cage back in the middle of brood-nest and let it remain for five days, and don't disturb the hive any sooner. Then you will find her out and 'laying. Don't depend on the pasteboard, for strong colonies will tear it off at once, but weak ones will hardly touch it at all.

Llano, Texas.

## Q UREMINS.

## Improved Golden and Leather Colored

 Italian is what H. G. Quirin rearsWe have one of Root's best red clover breeders from their $\$ 200$ queen, and a golden breeder from Doolittle, who says, if there is a queen in the United States worth $\$ 100$, this one is, these breeders have been added to our already improved strain of queens; for the coming season.
J. L. Gandy, of Humboldt, Neb., wrote us on Aug., 15th, 1900, saying that the colony having oue of our queens had already stored over 400 pounds of honey. (mostly comb) he states that he is certain our bees work on red clover, as they were the only kind in his locality and apiary.
A. I. Root's folks say that our queens are extra fine, while the editor of the American Bee Journal tells us that he has good reports from our queens from time to time. We have files upon files of unsolicited testimonials. After considering above evidence, need you wonder why our orders have increased each year?

Give us a trial order and be pleased, we have years of experience, in rearing and mailing queens, safe delivery will be GUARANTEED. Instructions for introducing sent with each lot of queens.

Queens now ready to mail.
Warranted stock, $\$ 1.00$ each, 6 for...... \$500
Tested queens, $\$ 1.50$ each, 6 for.......... \& 800
Select tested, $\$ 2.00$ each, 6 for 1000
We have 100,000
FOLDED CARTONS
on hand; so long as they last we will sell them with your address printed on in two colors, at $\$ 4$. per 1000 , or 500 for $\$ 2.75$. At above prices you cannot afford to place honey on market without cartoning it.

Address all orders to
H. G. QUIRIN, PARKERTOWN, OHIO,
(Parkertown is now a money order office).

## The Phalaris Grass.

Elsewhere illustrated our readers will find the John A. Salzer Seed Company's, La Crosse, Wisconsin, Phalaris Grass.

This grass grew at La Crosse, Wis. to a height of 8 feet the past summer and is one of the most remarkable grasses for wet moist soil to be some years ago while in Russia, and have found it extremely valuable as a meadow grass. It is hardy, very prolific, withstanding the coldest weather and growing on very indifferent soils. It is fully described in their cata$\log$, so also about 100 different kinds of grasses and clovers and forage plants. Among these we mention the remarkable Billion Dollargrass, that attained a height of $15 \mathrm{ft}, 6 \mathrm{in}$ ches in 1:00, in Wisconsin. This Was done by cutting three crops of hay respectively, 5 feet, 5 feet 6 in c hes and 5 ft tall and after that it gaveseveral months of pasturage.


Then they are the introducers of the Bromus Inermis in a large way and use of this seed annually one quarter million pounds.
Of Speltz, which they introduced last year for the first time, they used one and one-balf million pounds to supply their trade, and the way it is selling thus far, this spring they will double this a mount. Speltz not only furnishes magnificent flour, but it is perfect food for the cattle. The straw is almost as rich in nutritious quality as Timothy hay.
Salzer's great catalog is worth $\$ 100$ to any wide awake farmer, as it is brimful of new creations in the farm seed line. It is mailed to any address upon receipt of 5 cents for postage. by writing to the John A. Salzer Seed Company, La Crosse, W is.

Good actions are the invisible hinges of the doors of heaven.Victor Hugo.

## The Progressive BeemКeeper.


#### Abstract

A journal devoted to Bees, Honey and Kindred Industries.


Terms: Fifty cents per year, in advance.

\author{
G. M. Doolittile, Will Ward Mitchell, $\}$...... Editors

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Mr. Frank L. Aten, Round Rock, (Central) Texas, writes under date of March 23: "We had a fine rain last night, and the prospects for a honey crop are good."

On a recent visit to the north pole (I should say the pine timber of Wisconsin), we made a call on Bro. York, editor of the American Bee Journal, while passing through Chicago. We were pleased to find the 'Old Reliable' quartered in excellent rooms on the ground floor, about 4 or 5 blocks from the Northwestern Depot. The editor greeted us with one of his pleasant smiles, and I can truly say that he appears to be in better health than ever before.

From the Ameriean Bee Journal of March $14 \pm$ h, we learn that Mr John B. York died of pneumonia, at Randolph, Portage Co., Ohio, Sundáy, March 3. Of the death of his father Mr. York has to say:
"Father was born Aug., 24, 1829, in Starke Co., Ohio, only a few miles from where he died, He left mother and seven children to mourn his departure-four sons and three daughters, the youngest being a son 28 years of age, and the only one unmarried. Father lived to see his children grown up and all in com fortable circumstances. He believed that to give them a fair education and ability to look out for themselves, was far better than to leave them financial wealth. He was wise in thus doing. We believe father was fully ready not only to die, but also to live aqainin the Eternal Home, where all his family hope to meet him by and by, to part no more."

Honey in cans versus barrels, is something that has been discussed considerably for a number of years, and I wonder why there is two sides to this ques-
tion. With me there is but one-it is cans; but I want to ship and receive my honey in new cans. Quite lately we received between 2,000 and 3,000 pounds of extracted honey from Texas. Most of this was put up in old cans; and while there was a loss of only 80 pounds in weight, that 80 pounds daubed up the balance so badly, and spoilt the crates or boxes that held the cans, that not only was there a loss of honey, but we had to buy several new cans and more new boxes to fix that boney so it would be a presentable article for sale. Old rusty cans may look as tho they would bold honey, and yet when they are slammed and pounded around as is the case while they are in transit, they become sieves. We hope no one will advertise through the bee journals any more old cans for sale. If there should appear such a one we will run our pen through it.

Last month we reported that we had a good many orders ahead, and would not be able to fill orders promptly, but since then we have bought several car loads of goods, put on a few more men, added a few more hours each day, and can now state we are able to fill orders promptly. Please send them along.

The following cut illustrates a little queen-clipping device that has been advertised for a number of
 years in the American Bee Journal. To see this little machine and to know how to work it is to fall in love with it. We bought quite a lot of these little devices, and offer them by mail, postpaid, for 25 e apiece; or we will club them with the Progressive for 10c extra; that is, 60 c for both the Progressive and the device. Anyone sending us a new subscriber, however, with 50c, can have one of these queen-clippers free.

Editors Hill, Hutchinson and York have been having quite a controversy over the color of wax: what would color it, what would discolor it, and what would bring it again to its original or natural color? I have been trying to find Editor York's point of dispute, if there is any, and if there is not, what is the dispute about?" Is there any standard of color to wax? If so, what is it? Some wax from the south is of an orange color, spoken of sometimes as red wax; then there is other
wax, called yellow; then we have the straw colored wax, This is not the original color but comes from particles of comb being left where they could get wet and dry again at intervals, and have gone through a half bleaching process. Then we have the white wax (bleached wax); this is the highest priced commercial wax of all; yet it has lost all its aroma of bees wax. Any of the coloring in the above different grades of wax can be destroyed by careless melting, burning, using dirty vessels or dirty water to melt it in, or allowing soot, or other dark substances, to mix with it while in this liquid state, but after being turned dark or black by any of these foreign substances it cannot be brought to a bright yellow color or any other color, except a bright dark color, by slow cooling. For instance, the color will not settle. If you think it will, take 100 pounds of yellow wax and a quarter of a pound of lamp black. Keep liquid for a few days, a few weeks or a few years, then let the wax cool and the coloring substance of the lamp black is still in the wax, while what little ashes that was in the lamp black, has settled Butan expertwax cleanser can take the lamp black coloring out of the wax (but not by slow cooling) and the original color of the wax remains.

Go Slow:-Being hasty in adopting new methods and ideas is unwise. Test them thoroughly before entering into them largely. Heavy investments, unce in a great while, give large returns, but only too often failure follows, unless one makes haste slowly. Especially is this true in apiculture.

Stimulating Bees:-While it is advantageous to stimulate bees at the proper time, and in a proper way, yet it is not advisable to force them to breed too rapidly, before they can fly out without loss, as we are liable to have extreme changes in the spring of the year; and if there is more brood than the bees can properly care for during the cold spells, it is liable to be chilled, causing loss and disaster.
Antiquity of the Honey Bee:-It is claimed that the honey bee has existed geologically as an inhabitant of our earth, ages before the appearance of the human race, living, doubtless, as now, in orderly communities, laboring for a common purpose, and leading a
wonderful life in all of its interesting relations with each other. The industry, the law of order, the neatness and the devotion is remarkable, and well worth the imitation by families, states and nations.

Successful Operations:-Upon their being done at the right time, depends the success of many of the operations of the apiary. From what we often see, it is evident that all bee-keepers do not realize this. The wise man said in the Scriptures, when he wrote under inspiration, "To everything there is a season, and a time to every purpose under the heaven," and though he was a preacher, instead of an apiarist, he could have done little better, had he been the latter; for unless the manipulations and operations in the apiary, are done at the right time and in the proper season, our purposes no matter bow good, wili fail of the desired success.
Location:- "To everything there is a season, and a time to every purpose under the heaven," can play no vital part in the apiary, or under the apiarist's guidance, unless said apiarist fully understands the locality which he is in, as regards the time of the blooming of the pollen and honey producing flora; for in the bringing of the bees and this flora together comes the success. If the main honey producing flora commences to open on June first, and closes with the first week in July, no success can be obtained where the maximum number of bees arrive on the stage of action on July 10th, as is generally the case with the would be bee-keeper, who is always talking about his "luck". "A thing that is worth doing at all is worth doing well," is an old, old saying, which is doubly true in bee-keeping, and the main "doing well" part in apiculture, is in bringing our bees to the highest state of perfection, as to numbers, just in time to meet the honey producing fora .

Difference in Working Qualities:-
There is a marked difference in the working qualities of bees. Why this difference in industry is so great has often been a surprise to their owners. The jmportance of breeding from the best colonies is great, and is becoming better understood by our American apiarists. And if we are to take the present fad as a criterion to go by, the best colonies to breed from are those having bees with the longest tongues. Of course a long tongued bee can reach nectar in flowers having a long or deep corolla, beyond that of one having a shorter tongue, but just why a long longued bee should be more industrious than one with a short tongue, is something which has not been explained as yet. Neither has it been explained why the long tongued bee should store more honey from such flowers as fruit bloom, basswood, buckwheat, etc., the flowers of which are so flat and open that any bee with a tongue not more than half as long as those having the shortest, could reach all the honey secreted in those flowers with perfect ease. However, there may be other reasons why bees fail to accomplish much, beside the quality of the bees. The beginner is often impatient for increase, and much increase means little honey. In wet seasons bees generally get just enough honey to stimulate breeding, which gives large numbers of bees, with hives crowded with brood and very little honey in either broodnest or sections. While it is admitted that there is a difference in the working qualities of different colonies, yet it is well to remember, that when bees accomplish little or nothing, our locality may be overstocked, or the season has been a poor one.

March Work:-Where bees are wintered in the cellar, this is the month in which they should be put on their summer stands, doing this work the fore part of the month in the south, and
the latter part in the north. Some warm favorable day, on which bees can fly, should be selected for their removal from the cellar, and where not more than one-fourth are set out at a time, and they well scattered about the yard, there will be less confusion and mixing of bees. Set out one-fourth in the forenoon, and about two to three o'clock in the afternoon, another fourth, placing these last about among the first set out, finishing setting out the rest on the next favorable day, is the plan I adopt with good results. Colonies wintered outside should have their entrances contracted to from one-half inch
to two inches in length, according to the strength of the colony, and all top or winter ventilation, has such been used, stopped and closed tightly, as ail eracks or openings about the top of the hive allow the warm air to escape from the clustered bees inside. During March, April and May we should seek to conserve the heat of the colonies as far as possible, and to protect them from the attacks of robbers. Beside this, if we know that each colony has plenty of stores and a good queen, little more is needed during the month of March.
G. M. Doolittle, Borodino, N. Y


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Yours Fraternally,
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[^0]:    J. D. GIVENS, Lisbon, Tex.

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[^1]:    "If any person loves something else more than they do to study into bee-keeping, and only do so as a sort of duty, let them be assured that they have mistaken their calling, and the sooner they leave it and go to that which at all times gives them pleasure, the better they will be off, and the better it will be for the world."

[^2]:    "Of course you will observe that the scene of this fight was in Amity, which, to say the least, was very ironical, that. metaphorically speaking, one brother sought to kill, or "do up' the other, and that this fratricide might be accomplished according to the ancient usage, as recorded in Holy Writ, "Kaine" was brought in to assist one of the brothers in his fell purpose. However, the plaintiff would not be disposed of in this summary manner, and knowing of a firm of distinguished legal gentlemen, who, be it said, "Merritt" their "Bacon," he enlisted them in his behalf. These lawyers were "Bent on" (Benton) going to the "Root" of the matter, and, accordingly sent for certain gentlemen from Washington and Ohio to assist them in

[^3]:    "Mr. Gill said when by careful management along those lines which have a tendency to keep down and anticipate swarming, the actual swarming was reduced to 60 per cent. increase, that that was just about the right proportion to keep up the number in the apiary, and therefore a special non-swarming management was unnecessary. He also mentioned the fact that he had attended to five apiaries the past season. "How's that" I said "if the bees swarmed 60 per cent.?" "Oh." he said, "there are five of us, and we each bad an apiary to watch." "Then you did not do all your work yourself" said I. I forget whether he said anything in reply; but it is

[^4]:    Honey-gathering qualities (incidentally long-tongued bees.) Prolificness of queens (incidentally hardy and well-developed queens.) Swarming, gentleness, wintering and beauty."

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