The bee-keepers' instructor. Vol. III, No. 7 July, 1881

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VOL. III. JULY, 1881. NO. 7.

THE BEE-KEEPERS' INSTRUCTOR.

Webster Thomas, Editor.

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THE

Bee-Keepers' Instructor.

VOL. III. ADELPHI, OHIO, JULY, 1881. No. 7.

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Our Contributors.

For the INSTRUCTOR.]

Review No. 3.

GEORGE W. HOUSE.

On page 475 we notice editorial comments on last review, etc. We thank Friend Thomas for his candor, and will try and set him right in his view of us. Thus—on page 451 Friend T. says: "The mortality the past winter has been much greater than usual, and from the reports we are receiving daily a large proportion of it can be traced directly to this cause." [The juices from cider mills and decayed fruits.] As all our colonies had an abundance of good white honey in their hives last fall to winter on, and as no dark or fall honey was stored, *we* can not trace the cause of the mortality to bad food, or juices from fruits. Furthermore, at one apiary there are no less than half a dozen cider mills, with many acres of grapes, pears, etc., within reach of the bees. At another apiary our bees have access to orchards and a cider mill. Still at another apiary our bees have no access to cider mills, and a less number of orchards. The manner of packing and the conditions were equal, all things considered, in the three apiaries, But our losses in the apiary mentioned first were much less than in apiary No. 2.

Then again we know a bee-keeper living close by one of the largest cider mills in the United States, and his losses are but 7 per cent., while others around him have lost 60 per cent. The man we have reference to has more bees than all his neighbors combined. Now, if the juices from decayed fruit was the cause for these losses, why did not this man suffer as much as his neighbors? In connection with this we will ask, if bad food is the cause for this mortality why did our bees not suffer from dysentery and such heavy losses fifteen years ago?

Our bees are packed in rows, under sheds for the purpose. Some rows wintered with scarcely any loss, while in the next one to it 40 per cent. died. With no fall honey to gather, and a large cider mill close by, they should have gathered as much of the juices as any one else's bees. If it is bad food, why were not the losses as great in one row as the one next to it? We can trace the cause for this difference to the shade of trees. Our bees need as much sun-light as possible during their winter flights.

Though our criticisms may have seemed harsh or out of place, Friend Thomas, our only motive was to protect the inexperienced from the false theories that have been such a curse to the mass of bee-keepers. Our remark in last review was not intended for you, but for those who *report* that they can trace the cause of this mortality to the juices of decayed fruit, etc.; and again we say, if any one can *trace* their losses to this cause, let them come forward and explain. We ask for information, and want the solid facts, backed by practical experience.

The novice in bee-keeping who reads attentively the periodicals, and works on apiculture, for the purpose of securing *real facts* respecting bees, must at times be sadly puzzled. Extraordinary statements are so often made in minute detail, having all the appearance of reality, and yet so contrary to all past experience, that one hardly knows *what to believe.*

It is a great pity that any one who really wishes to impart information on important subjects, and where there are so many beginners, should theorize, or guess, or imagine, and then make their statements as if they were real facts. There are articles constantly appearing in print, about which an intelligent bee-keeper *knows* that the writer has either been grossly deceived himself, or that he

is deceiving others. Theories do well enough for fine talk, and when substantiated by facts are good. But *facts* are what the practical apiarist wants, and one fact is worth many theories. It is a fact that a majority of our contributors have but a limited experience and keep but few bees. When they get about so much knowledge they think they *know it all*, and commence instructing, etc. Right here I wish to ask a question, and I hope some one will answer it. Why do not our largest and most practical apiarists, whose colonies are numbered by the hundreds, yes thousands, contribute their experience through our journals? Is it not because our editors and novices think (or say) that their experience and writings must not disagree with the theorizer or the beginner? or is it because they do not wish to impart their knowledge free of cost? The topic of wintering is one of the most important pertaining to apiculture, and will bear much thought and investigation; so send along your *tracers* and give us all a chance to sift the matter.

We cannot agree with Friend Egan on his manner of introducing queens. We do not see the necessity of wasting so much time and work. Our plan is as follows: Open the hive and take out the frames, one at a time, until you find the queen, shaking the bees off into a box near the front of the hive until you have a fair swarm of bees in the box (the old queen being killed or caged). Take some honey in a table-spoon from the hive you wish to introduce the queen into, and then roll the new queen in this honey until she is thoroughly daubed. Shake the bees in the box together, and drop the queen among them. The bees will commence cleaning the honey from the queen, when they should be turned out upon a board in front of the hive, so that they may run back into it, and all is done. You have safely introduced a queen and the bees did not know it. We have practiced this mode for years, and do not remember of ever losing a queen.

In regard to keeping combs that bees have died in, we wish to say there is no need of suffering with brimstone. As soon as a colony dies clean the hive and combs; then close up the hive tightly, and look the combs over once a week until used, picking out the moth worms as fast as they hatch. You will have but little trouble in this way.

About "Fertile Workers." You have named them right, Friend T., when you call them "contemptible pests." We have tried everything we ever read or heard of, and several years ago discovered a simple treatment that is a *sure cure* every time. It is this: Insert in the hive one or more queen cells that are nearly ready to be capped over, when the bees will go on and complete them and raise a young queen, thus superseding the fertile worker easily and effectually. They will destroy queen cells that are capped over, every time. Try this method and see.

We have been having several cold waves in June, which is bad for the bees.

Fayetteville, N. Y., June 27, 1881.

We are very much obliged to you, Friend House,—and we think all our readers will echo our sentiments—for your excellent review of last month's journal. Those two items alone of how to introduce queens and how to get rid of fertile workers, ought to be of inestimable value to the bee-keeping fraternity. Just such practical information as this is what bee-keepers, as a rule, are in need of. In regard to the cider mill question, we have just one question to ask you, and would like to be answered with a plain yes or no: Do you believe that cider is a fit food to winter bees on, and that colonies supplied with it would be likely to live over winter? or if they SHOULD live over winter that they would be in a healthy condition in the spring? We do not think so, and would advise anyone whose bees may have empty combs at any time towards fall to feed them good sugar syrup, providing the honey flow is scant, and not run any risk. "An ounce of prevention is worth a pound of cure."

For the INSTRUCTOR.]

"How Goes the Battle?"

JAMES HEDDON.

Without devoting this short article to the why or the how of our recent great losses, I thought perhaps it would not bore some of your readers to hear of the

condition of honey culture at the "Michigan Apiaries." If I have made no mistake, I succeeded in bringing through 74 colonies, out of 196 put up for winter. They were all wintered out of doors, and nearly all packed in boxes, part with sawdust and part with chaff; a few were left uncared for. Those uncared for were in a separate location, and those packed with sawdust were also in a different location from the chaff-packed ones. Of those neglected ½ lived, while of those packed with sawdust, a greater proportion lived than of those packed with chaff. Evidently, to me, the *location* from whence the *stores* were gathered governed the outcome.

The apiary advertised in your columns was sold several months ago, but I forgot to order the notice out. After my losses and sales, I had but 7 colonies left, but by purchase have increased my apiary here at home to 108. In purchasing bees I dealt, in the main, with parties possessed of honor and judgment, as well as choice stock, and paid them their price without any "jewing," and feel that by such a course *I* am the gainer. I have always plead for good stock, and against cheap bees (using the term as applied to the quality), and when I came to buy I found this rule of much more value than ever before. For one lot I paid $1.50 more per colony than for the other, and would have liked to have gotten them all from this lot, but as I could not, I am now requeening many colonies from my old breeding stocks which I have used for some years past. I am not allowing myself to be governed by the number of the stripes, but by the action of the workers, in selecting and destroying strains.

To raise eight to twelve thousand lbs. of honey and end the season with 200 to 250 colonies of bees is no small undertaking; yet such is my aim, and so far I have reason to think I will hit the mark. Take a look at Chicago since the fire, and let the marvelous results of pluck and energy be a lesson to us. Our losses are to *us* what the fire was to the commerce of that mighty metropolis of the West; yet Chicago has more than recovered what it lost, and so can we.

I have just moved my bees to a better, more pleasant and less limited location, less than a mile from their former one; and though I moved over 100 colonies after work had been commenced on white clover, and nearly ten swarms had been hived, I have not lost any bees. Some few returned and were peacefully united with a few of the lighter colonies that were left for the purpose, and then these carried away as were the others, until we have all but one colony moved. Swarming goes right on, and we have some 36 new colonies formed. Allow me here to say that I look more favorably upon increase this season than formerly. I feel that bees are, and will continue to be, a staple commodity; that the business is now upon a firm footing, and, like any other business, will yield a reward just in proportion to the energy and judgment devoted to it.

At this writing we have surplus off, started in 1881. White clover here is only a partial crop, owing to a local two-weeks' drought that we suffered just as it was opening out. Basswood is set very full, and with average weather a good yield may be expected. Of the fall flowers I can say but little yet, though the time of their flow will soon be here. Later in the season I will with pleasure give you a full report of my success or failure. I propose to stand by the ship during all storms, and not die out of the business, but remain in till I *sell* out. I see no reason to change this business for any other, now that my throat-poisoning is so much better.

Dowagiac, Mich, June 20, 1881.

For the INSTRUCTOR.]

Melilot as a Honey Plant.

NOAH GILMAN, M. D.

(Concluded from the April No.)

I have cultivated the melilot for eight years, or rather have not cultivated it, but have simply scattered it on top of the ground late in autumn. Being a biennial, it blossoms the second year, produces a large quantity of seed, which sows itself, and, giving us a crop of honey, dies. The blossoming begins here about the last week in June, when the plant is about two feet high. From this time it continues to branch out and grow higher, until, if not crowded, it attains a height of from six to eight feet. As it grows higher and branches out in every direction, it is covered with new blossoms until it is killed by the hard frosts of October. Between three and four months the plants present a complete mass of white blossoms, and at the same time the seeds from the successive

crops of flowers are being developed. If you collect the seed it must be carefully stripped off with the fingers, being careful not to injure the flowers. It produces an immense quantity of seed, which could be sold for a mere song if it ripened all at once, but ripening as it does, all along through the season, the saving of the seed is very tedious, and consequently expensive, if it is done so as to not injure the flowers. I collected 100 pounds last fall, and sold it at wholesale for twenty-five cents per pound. I could have obtained ten times that amount of seed if I had been sure of a sale.

About its value as a honey plant there can be no doubt. The reports from various parts of the United States, which I gave in the April number, are not exaggerated.

There are several things to be taken into account when estimating the value of a plant as a honey producer. When several plants are growing together, it is very easy, by watching, to find out which the bees like best. In deciding this you decide which is the best honey plant. In estimating the value of a honey plant, however, there are other considerations to be taken into account besides the mere production of honey. The principal one of these is the labor and expense of introduction and cultivation. Mr. Root, of *Gleanings*, estimates that there are forty or fifty plants which are of more or less value as honey producers, and if all or a part of these are growing convenient to our apiary, it is difficult to ascertain, or even approximate, the quantity of honey gathered from each. We can easily ascertain how much honey our bees store during the season, and what plants they gather it from, but when it comes to dividing the gross amount among them, we find trouble. We will suppose that each affords an equal amount, and as we can not cultivate them all, our choice will be the one that can be cultivated with the least trouble and expense. For the sake of comparison we will take melilot and mignonnette. The seed of the latter costs 20c. per ounce, or $3.20 per pound, while the former only costs 25c. per pound. The cost of cultivation is also largely in favor of melilot, as it only needs to be scattered on the top of the ground on waste land, around the buildings, in the fence corners and along the highways. It will grow among nettles, burdocks, thistles or grass, or any weed that grows; and no flowering shrub is sweeter scented or more ornamental.

To cultivate the mignonnette requires as nice preparation of the soil as any flower that grows. To prepare and cultivate a bed of mignonnette two feet square would cost more than the cultivation of 25 acres of melilot. Putting the two plants on an equality as to honey-producing qualities is only a supposition, as I have had twenty stands of bees within ten feet of a nice bed of Mignonnette and did not see a bee light on it during the whole summer; while if a single stalk of melilot stood within one hundred rods of the apiary, before it would be in blossom a single hour it would be black with bees.

Eldora, Iowa, July 9, 1881.

For the INSTRUCTOR.]

A Few Wintering Items.

J. H. MARTIN.

There has been much discussion about the best time to put bees into winter quarters, but it has been proven by an ample experience, at least to me, that November is the month, before cold weather settles down to stay. I usually remove mine to the cellar at any time from the 10th to the 20th of November, when the hives are dry, but owing to the putting in of a new cement bottom in my cellar last fall, I was delayed until the 1st of December, and then put them in during a snow storm. I think the bees might have done a little better if put in earlier, but could see no great difference over the wintering when put in at an earlier date. 30 were packed early in chaff on their summer stands, and of these 75 per cent. died. This was my heaviest loss, as but a small per cent. died of those wintered in the cellar.

A neighbor who believes in putting his bees into winter quarters late, allowed them to stand until the 1st of January, at which time the thermometer marked two or three degrees below zero, all day. The bees, mostly in box hives, were removed nearly a quarter of a mile, and put in a small, cold cellar. The result was that out of the 120 colonies put in, 90 were taken out dead; and the 30 that were left dwindled down one half. The owner told me recently that it had been some time since he had looked at them, and he didn't know how many

were left. He is now convinced that zero weather is unfavorable for the moving of bees.

I have another friend who wintered 220 colonies out doors, without any protection, whose loss was 200. He had heretofore wintered in his cellar with uniform success. Another friend had eleven swarms in the fall, which had produced but little surplus honey, but had the body of the hives well filled. They were in box hives, and were placed on a stand two feet in height. The hives were blocked up an inch and a half from the bottom board in front, there being from four to eight square inches of holes all open under the corners, that were full of cracks. They were not sheltered by fences or buildings, but were where the winds had free course all around them, and only one swarm died, the rest coming through in good shape. Five of them were very strong, and had sealed drones by about the 10th of May. I purchased the ten (they were blacks and hybrids) for $40.00, transferred them, and they are just booming now. I think bees need more ventilation, both in the cellar and out, than we have been giving them.

Hartford, N. Y., June 14, 1881.

For the INSTRUCTOR.]

Bees by the Pound.

MRS. L. HARRISON.

Before me is the price-list of an apiarist of an adjoining county, and therein we find the following: "One pound of bees in June, $2.00; with an Italian queen, $3.00." Now this is a very nice way to fill up our deserted hives, for all we have to do when we get the bees is to empty them out on the combs. But will it pay when honey goes begging for a market? How many pounds will a colony weigh? Would it not be cheaper to buy a colony in a hive, even if we made kindling wood of the hive afterwards? A bee-keeper in an adjoining county weighed a swarm clustered on a limb, and weighed the limb after shaking them off, and ascertained that the bees weighed twelve and one-half pounds. At two dollars per pound this swarm would have been worth twenty-five dollars, saying nothing of the queen. The old colony, before this swarm issued, ought to have been worth fifty dollars. Who among us has the cheek to ask that price for a colony? But do them up in pound packages and how many will bite, not seeing the hook.

It is assuredly the best way for a novice to purchase a valuable queen, to have her sent in a pound of bees, for then he will run no risk in introducing.

Peoria, Ill., June 27, 1881.

For the INSTRUCTOR.]

Chit-Chat.—Criticisms, etc.

C. W. MITCHELL.

I have been reading the INSTRUCTOR for some little time, and can say for it that there is as much real instruction in it as in any bee journal published in America, so far as I have seen. But do you not think it could be made still more useful by having an occasional article from some well informed apiarist, telling us what we should *not* do if we wish to be successful in apiculture. I quite often notice articles (not so much in the INSTRUCTOR as in other papers) advocating the use of something or other, which, if used without fully understanding it, might prove very disastrous to the bees. For instance, I noticed in the *Exchange* some few weeks ago that puff balls (smoke fungus) were recommended for fuel in smokers, nothing further being said in regard to it. My advice is, be very careful how you use it, and to the beginner I would say, use it "nary a bit." I would not use it under any circumstances in a colony of bees having brood, as I think it almost certain death to the brood. Be careful, not only in this particular, but with all experiments, until it is known just how far we may take the new departure safely and with profit.

I wish now to say a word, if you please, in regard to the INSTRUCTOR publishing articles that seem to be of a personal character. I have reference to Mr. House's criticisms on Mr. Jeffrey, rather than on his articles. I am well acquainted with Mr. J., and think it nothing more than right and fair for me to say that I think Mr. H. has done him great injustice. Mr. J. is one of the best informed apiarists in the country, and I consider him a reliable man to deal with. Last year I bought nine queens of him, and having a running account with him I did not pay for them until fall, and having tested them fully, he refused pay

for all that proved to be hybrids, and this after selling the lot at the very lowest price. He has for several years had more orders right at home, from his own State, than he could fill. Thus much in the cause of justice and fair dealing, without any solicitation from Mr. Jeffrey.

Bees died badly here last winter. I lost but four out of nineteen colonies. I use the L. frame in a hive something like the Simplicity. Success to you and your journal.

South Britain, Ct., June 22, 1881.

Thank you, Friend Mitchell, for your kind words and wishes, and especially for your suggestions. It is a very nice point to critiqise through the press without seeming to become personal. If a person is not very guarded and careful, he is liable to give offence where no offence is intended, especially if the critic is of a strong, combative temperament. For this reason the critic, whoever he may be, should be very careful not to impugn the MOTIVES of others. It is impossible for us to ALWAYS judge fairly of the spirit in which a criticism is made. We do not, however, believe that Mr. House intended to do Mr. Jeffrey injustice, although his article seemed to be a little personal in its character. The fault was with Mr. Jeffrey in the first place, in speaking of the queens so as to leave the impression that he sold them for 75c. each, knowing that they had mated impurely, without telling the purchaser so. Mr. House, as a conscientious critic, could not pass this by without notice, and he said no more than was proper under the circumstances. Mr. Jeffrey, however, explained the matter in a very gentlemanly and satisfactory manner in the May INSTRUCTOR, and we do not see how anyone, after reading both sides of the question, can think he has been wronged. If he had only been a little more explicit in his first article, the misunderstanding would not have arisen, and the subsequent discussion would have been avoided. Correspondents should not be so indefinite in writing, and think that because THEY are well acquainted with the facts concerning which they write, that others must necessarily be too. In this we do not have reference to Mr. Jeffrey more than to a great many others; in fact, the majority of writers are rather indefinite and incomplete in their statements, writing, to a certain extent, as though their readers were acquainted with the facts in the case, and in this way mistakes are liable to arise—as in this instance.

For the INSTRUCTOR.]

A Short Talk With the Readers of the Instructor.

EMBRYO.

Science is very properly defined by Webster as systemized knowledge on any branch or subject. Therefore in making the assumption that bee-keeping is a science, we invite a great deal of criticism from certain wiseacres who seem to think it the height of presumption to advance any theory or argument not in consonance with their own reasoning. [By the way, worthy editor, why is it that we so often come across just such narrow-minded individuals as those described above; men who scoff and sneer at and seek to deride and publicly ridicule all those who are unfortunate enough to cross them in offering their views and opinions upon any subject that may come up for discussion? Newspaper courtesy seems to be a scarce article now-a-days, and if it ever did exist has wofully retrograded.] Bee-keeping, while a science, is a very imperfect one; imperfect because it is not yet properly developed. Viewing the matter from this standpoint, however, we might venture to say that none of the so-called sciences are yet brought to their highest or fullest state of developement. Astronomy, that master science, that presents so broad and exhaustless a field of research and study, and has enlisted the powers and intellectual energies of the brightest intellects of the astronomical era, has its imperfections; and to-day the astronomers are puzzling their brains over the lately-discovered comet that is visible in the northern heavens, and are divided in

opinion as to whether the erratic wanderer has a periodicity of 69 years, 74 years or some other number of years. And yet no one will for a moment pretend to argue that Astronomy is not a science—a beautiful science. The bee-keeping of to-day is radically different from the bee-keeping of a century ago. The subject is one that has attracted a great deal of attention from a number of the clear-headed thinkers of the age, and as a consequence apiculture is beginning to receive the distinction that it merits. As constant thought and study how to manipulate the winged insects so as to get the greatest benefit from them developed new ideas and information on the subject, and this information was constantly disseminated through the current literature of the day, and through books, new recruits were gathered and an increased interest awakened. Information on any subject must necessarily at first be very crude. He who would gain knowledge must do it step by step and series by series. Thus it is that many beginners, in taking hold of apiculture, do so confidently believing that they have a bright and shining path before them, and have only to follow in the beaten track of precedent to make a success of the business. Never was there a more mistaken idea. While the bees are all governed by the same laws, and are all possessed of the same instincts, it must be borne in mind that these laws are subject to alterations, owing to the difference in latitudes, perhaps, and their habits must vary in conformity with those changes. Right here the ingenuity of the bee-keeper should come in. He should so study the habits of his interesting charges as to be able to prescribe for them with unerring precision. If dysentery overtakes them he should know what dysentery is, how it was caused and how to eradicate it; if moths attack the hive he should be informed as to the best and most effective method of evicting them. In short, there are a thousand and one things connected with the successful management of an apiary that are necessary to learn to make the business a success.

Bee-keeping, to pay, should be conducted in a scientific way. There should be no guess work about it. The beginner should provide himself with all the pertinent information on the subject that the bee literature of the day affords, and study and digest it thoroughly, and then, combining theory with practice, working and studying in an earnest, never-say-fail manner, his ultimate success is assured. He should not, however, confine himself strictly to the text books. Generalizations, much as they contain, may not fit the case he may have in hand. He must combine the text books and the practical, every-day working of his apiary, and draw intelligent deductions for himself.

"There is no excellence without great labor" is a motto that the bee-keeper should constantly keep in mind, and make it serve as an incentive to spur him to greater excellence in his "high calling."

Adelphi, O., June 29, 1881.

Semi-Annual Session of the North-Western Bee Union.

The meeting of this association was held at Hastings, Minn., May 17th. From the report sent us by the Secretary we extract the following. Several good essays were read, but we have no room for them—at least not at present:

The meeting of our Association was held at the court house in this city on Tuesday afternoon, and although the attendance was rather small the proceedings were of an interesting character to all persons engaged in bee culture.

In the absence of the president and secretary, the convention was called to order by the Rev. J. G. Teter, of Brooklyn Centre, and Dr. Percival Barton, of Inver Grove, and L. E. Day, of Castle Rock, were elected president and secretary *pro tem* respectively.

The program first called for reports on wintering bees. Mr. Teter commenced the winter with 13 colonies. He entrusted them to the care of parties in St. Paul, and from the want of proper care he lost all.

Mr. Day had 43 colonies; left them on summer stands until December, when he put them in the cellar. Toward spring they showed signs of disentery—when taken out only five were dead, but since they have dwindled to 19 colonies. He attributed the cause to the want of proper care in the fall.

Mr. Barton recommended leaving them out as long as possible with safety in the fall, and taking out as soon as possible in the spring, but did not demonstrate

the means of determining the periods of safety; reported that his cellar was inclined to mould, and recommended warming with a stove to purify the atmosphere; had lost thirty colonies, some dying of starvation.

Mr. Felton had twenty-four colonies; took them out in March; two of the colonies died with dysentery; put them back again on account of cold weather; took them out again about the middle of April; doubled them up on account of weakness, until now he has but twelve colonies.

Mr. Rosebock had 75 colonies; some were in good condition in the fall, and some were not; put them in the cellar about the 10th of November, and took them out the latter part of March; found six of the colonies dead; some had starved, others had smothered; used hives with doors in the rear, which he keeps open about half an inch for ventilation. Some have five or six frames with brood, and others only one frame; last season 4 colonies became queenless, and he broke them up; had lost about half his bees last season from spring dwindling: could not give cause for dwindling; a neighbor had wintered 125 colonies with the loss of only one colony.

Another member had tried to winter 23 colonies, and by way of experiment had put ten in cellar, and had used the chaff absorbent and protector upon the balance. Those left out were in good condition, except one which he had left too long upon the summer stand by way of experiment; opened on the 5th of March; all but one in good condition. In the cellar all were troubled with spring dwindling, and he had been compelled to build them up from the outside colonies. Had used the Doolittle hive.

Another had 157 colonies last fall, all with new honey; left them on summer stands all winter, and used chaff packing; left entrance wide open; didn't pack the caps; did well until the middle of Feb.; commenced to die latter end of the month; entrances were closed with ice; supposed there was ice inside. Flew on the 25th of March; fifty of the swarms were found to be dead, and the balance have since fallen off by spring dwindling, until now but fifty colonies remain; some are in very good condition; has several kinds of brood.

For ventilation Mr. Teter had tried running a pipe through the floor to the room above the cellar, in which a fire was kept, with very good results. Another member had placed hot coals in the bee room, to destroy the moisture, with very good results; thinks smoke is a good purifier. Some of the members were of the opinion that buildings are better than cellars if kept at a uniform temperature of from 35° to 50,° the greatest difficulty being to keep the temperature uniform; and houses covered with straw were recommended, with suitable ventilation.

Mr. Searles had lost four out of six colonies. Lack of ventilation and foul brood assigned as the cause.

For the INSTRUCTOR.]

The Present and Future Prospect.

JESSE MILLER.

Late in the spring our bee-keepers saw no very promising prospect for bees or honey this year, as the spring was backward and the bees greatly reduced, and it was thought if colonies could be built up, and made strong in numbers, with honey enough to put them through the coming winter, a good job would be done. Many united weak colonies to insure success. Was this necessary? Bees appeared slow to get down to "biz." Brood raising began late, but what followed? They went it with a perfect boom when her majesty got fairly down to business. With honey coming in and brood in abundance natural swarming began very unlooked for, and there appears to be no stopping it. A real swarming fever prevails. For example: An Italian colony being built up on seven L. frames, was doing well, we thought, when on the 11th of June it sent off a nice swarm, and to our surprise it cast another on the 21st, and still another small one on the 24th. This last swarm went off and lit a half a mile away, and was found by a man of pliable make, who hived them, and as they were so easily identified, by time of swarming, course taken, etc., he feared he might not succeed with them, so sold them for half price to get them off his hands. Bees are swarming themselves to death, we are told, and all that can or is being done, does not prevent it. Cutting out queen cells does not prove a sure preventive, nor is want of room a cause, as many have section boxes at the sides or above, or both, but they wont go to work in them, or only a few colonies are doing so as yet. The outlook in this

section for a large yield of surplus honey is not at all flattering, but that for increase of swarms has seldom been better. The losses of last winter will soon be made up.

This season offers ample opportunities to test the different methods of preventing too much swarming, as well as getting bees to work in section boxes.

How does this compare with the experience of bee-keepers in other localities? Is a long, hard winter for bees usually followed by excessive swarming?

Alliance, O., June 29, 1881.

We are unable to see, Friend Miller, that there is any connection between a long, cold winter, and excessive swarming. This swarming fever is the natural result of an abundant flow of honey, and is simply an effect following an adequate cause. If the honey flow had not been so abundant in May and June the results would have been very different. If we do not wish our colonies to swarm we must be careful that they do not get the start of us. They should be kept busy in some way, either by getting them at work in sections, or by giving them room and work in the body of the hive. A frame of brood and bees taken from them occasionally, and replaced with a frame of comb or foundation, will generally have a good effect. This, to be effectual, ought to be attended to before cell building is commenced. We are speaking now of cases where we wish to keep our bees at work gathering surplus honey. As to uniting weak colonies in the spring it is certainly a good plan, as the two united will be able to raise bees much more rapidly than they would, in a weak condition, separately. If you unite and build up, and then divide again, it is much better than to allow very weak colonies to struggle on and be all summer in building up to respectable-sized colonies. Have no weak colonies if it can be avoided, unless it is necessary to save a valuable queen.

For the INSTRUCTOR.]

Rocky Mountain Honey Bees and Their Care. No. 6.

W. M. EGAN.

PRODUCING HONEY and selling it is the sole object in keeping bees; and anything that will add a pound of honey to the producing capacity of a colony of bees is worth considering, and if practical and economical should be used to increase the production as much as possible.

In some localities the honey-gathering season is far advanced, in others just beginning. I presume many methods are being adopted to aid the little workers in increasing their stores. It has become an old saying that "a swarm of bees will gather as much honey in a nail keg as in the most elaborately constructed hive," and this is no doubt true if no advantages are given farther than a home. If they are not to be manipulated one is as good as another; but if a hive is properly constructed an apiarist can, by proper assistance, induce the bees to gather a great deal more than they would in their nail keg. For instance, a colony of bees in a hive can be accommodated to just the sized room they require to preserve the heat, etc., and as soon as a few combs are built, those unfinished at the sides can be placed in the center, thereby inducing greater zeal, as well as placing them in a better position to be worked upon, for we well know that comb is more rapidly built in the center of a colony of bees than at the sides.

In running for extracted honey we can give the bees an empty lower story (raising the full one up), and allow them to carry out their instinct of storing honey in the upper combs, which have been strengthened by one or more brood cocoons, and building new combs below in which to place their brood.

In running for comb honey a little different method has to be adopted, in order to have the combs nice and white. For this purpose Friend Doolittle's plan of side and top storing yields the greatest amount of nice white comb honey.

FOUNDATION is objected to by Friend Doolittle on the grounds that it is a luxury, and not economical; and I had almost come to the same conclusion until the plaster moulds came out. I now make my foundation machines, as well as my foundation; hence there is no outlay

beyond my labor, and the wax which accumulates in all apiaries. By the new process, too, I am able to produce a foundation that (owing to the moulding of hot wax unpressed) is readily worked out as thin as their own natural comb, and very rapidly. Several sheets may be placed in the center of a colony and worked out during the night, or a broad frame of sections filled with foundation may be placed in a colony and worked out into beautiful combs in one night. I believe if Friend Doolittle would try this plan he would recommend it as a successful one, even above that of side and top storing, as all the combs necessary to hold all the honey that can be produced during the season can be built out ready for use in a week.

OUR CRITIC last month unnecessarily misunderstands my writings on *queen rearing*. He tries to show by a quotation from my article that I would not sell a queen if I liked her, while the very opposite is implied in the sentence and especially in the sentence preceding (which see p. 459, second col., 1st and 2d sentences). The only reason for keeping the queen as mentioned was for the lack of a customer and because she suited me; if she did not suit me, and I had a better one on hand, she would have been sacrificed—*killed*. If I had had a customer I would have sent her to him.

I always select the best I have for my customers, from the kind they pay for. When my customers are supplied, I select the best left for myself, always preserving one or more of the choicest for breeding.

Perhaps our friend of the "Question Box" will call this "free advertising" as well as the "natural swarming impulse queen rearing." I do not claim any great superiority over properly artificially reared queens, only that if there is any advantage the natural process certainly has it. The main point is to rear queens from the egg. You can never fail to do this on the natural plan, but when bees are queenless they are in a hurry to raise a queen, and will sometimes select advanced larva, if it be in the hive. Of course if they have nothing but eggs from your choice colony they can not do otherwise than rear queens from those eggs.

I always count it economical to have a queen in the queen rearing colony as long as possible, otherwise they do not accomplish much for me after the queen cells are capped over. The greater economy it seems to me would be to take the queen cells out of the hive and put them in the lamp nursery after they were capped over, and return the swarm. By this means we need not have any queenless swarms at all. We can keep the bees from going off till the cells are all capped, by clipping the queen's wing.

S. L. City, Utah, June 29, 1881.

For the INSTRUCTOR.]

The Apiary.

A. F. MOON.

The principal part of the honey season with us is now over, although I have known bees to gather rapidly in August and September, and swarm as late as the fifth of the latter month. Some seasons the late honey is abundant and remarkably good. During the present season the bees in this part of Georgia have gathered a good deal of honey, but have thrown off but few swarms; some apiaries none at all, which may seem a little singular as large quantities of honey have been gathered. The cause of so few swarms can no doubt be attributed to the heavy honey dews, which enabled the bees to store honey so rapidly that they filled up the cells as fast as they became empty, taking advantage of Mother Queen, and cutting down brood rearing. Here was the place for the judicious use of the extractor, and a good hand to use it. The result would have been a big profit to the apiarist.

In June number of INSTRUCTOR Friend House lights upon me like a "bat upon a June bug," in regard to my opinion as to the cause of the great mortality of bees in the North. My opinion, based upon my own observations and experiments, led me to believe that the great and prevailing cause of disaster was to be found in the food they consumed. I have tried experiments with them both in-doors and out, and have found that those in dry, well-ventilated cellars, carefully protected and cared for, suffered worse than those on their stands, "even without a fly." Friend House says it is confinement; and that dysentery can be produced at any time of the year by confining a sufficient length of time, and in the next paragraph or two attributes it to "various conditions." Let us see what he terms the "various causes." First: It is his opinion that the cause is confine-

ment. Second: It is a cold damp atmosphere. Third: The "various causes" and conditions found in different hives is the cause of some being affected while others are not. He then goes on to say: "If it is bad food that is the cause, why do some colonies have dysentery while others in the same apiary show no signs of it?" Mr. Editor, this last shot, in my opinion, kills the goose. This one admission alone "kills his argument," for if the bees in the same apiary are affected differently how can he attribute it to confinement, as all are confined alike? This kind of an argument does not fill the bill; for while I do admit that confinement has its influence, and is, if you please, an aggravating cause, why look upon it as *the fell destroyer*, when it is frequently the case that a part of an apiary dies off with dysentery, while the rest is not troubled with the complaint. If bad honey is the controlling cause this matter is easily explained, for it is an undisputed fact, which Friend House is no doubt perfectly familiar with, that two colonies sitting side by side will often gather honey of a very different character. One will gather from a class of flowers producing the most beautiful honey, while the other, selecting another class of flowers, will gather honey of a very dark and inferior quality. This is no news to a practical apiarist, but may account for the great difference of different colonies in the same apiary.

Again Friend House says: "Allow me to ask another question: If bad food is the cause, why did not bees suffer from dysentery twenty-five years ago? All the various kinds of fruits and honey plants were as numerous in this State then as now, and furthermore, the juices of fruits were gathered by the bees as freely then as now."

Here I will have to call my friend to order, as I think he is greatly mistaken. Thirty years ago the country was comparitively new to what it is now, and thousands of wild flowers could be seen growing in almost every direction, especially on unimproved lands. To-day but few of these flowers are to be seen, and the bees have to resort to other sources for their supply; and if good honey can not be had, they, not unlike all animated nature, take the best they can get, and do the best with it they can. In the past thirty years the honey producing wild flowers have depreciated more than one-half, both in kind and quality. Then it was no uncommon thing for first swarms to fill an ordinary salt barrel and ten or fifteen pounds on top. This was principally gathered from wild flowers, which to-day are not to be seen, because the plow has destroyed them, and the bees have to look elsewhere for a supply.

I will now give a little of Mr. M. C. Hester's experience in wintering, etc. All who know him, know him to be an intelligent attorney, and a man well posted in apiculture. [His address is Charleston, Ind.] In one of his articles to the *Bee World* he says "he brought all his 27 stocks safely through the winter of 1873–'74 without the loss of a colony." This success was very gratifying to him after losing so heavily the two or three previous winters. He says: "It may be of some interest to others to know the circumstances attending this success. I wintered them in the cellar where I had lost so many before. The only difference I know of in their respective conditions *was in their food.*" When they died they had nothing but their natural stores gathered late in the fall. And last winter—1875—they had no natural stores, but were kept entirely on syrup made from a good quality of coffee sugar. The syrup was fed in October, and the bees set out doors in March. During four weeks in May and June he extracted over thirteen hundred pounds of honey from the 27 colonies. This is only one instance out of hundreds that might be given showing the great benefit to be derived from our bees having good, healthy stores.

Much time and talk has been given to this "muchly" disputed question, which I think ought to be settled in a practical way. I propose to send to each editor of several journals a colony of bees from the Sunny South. They will be in the common box hive, rather open, and are to be placed upon stands out of doors, to see if they will have the dysentery if the others do, and to see if they will die of confinement. I have confined bees without a fly for nearly eight months, without the loss of a table spoonful to the hive; and I venture to say, without fear of successful contradiction, that I can keep bees confined one year, or longer, if I can prevent dampness. I have known bees to be kept in frequently for three months, and could not perceive any dysentery. They ate less honey and came out much stronger than when not confined.

Rome, Ga., July 5, 1881.

Extracts From Various Letters.

We have a number of letters before us, for which we only have room for the most important points in a summary way. They are not of very recent date, but as they relate principally to wintering are more timely now—towards the approach of winter—than they would have been if published when written.

Herman Volkenand, Alpha, O., writes March 6th:

I have kept bees for 20 years, and have never seen such a year as the last; but few swarms and not a pound of honey. Examined my bees Aug. 10, and found about half of them short of stores. Aug. 22nd found that all had apparently gathered honey enough to last them over winter, but I suppose they gathered it from peaches, grapes and other fruit, of which we had plenty in the neighborhood. But the 25th of Nov. found my bees dying off rapidly. The 5th and 6th of Dec. put twenty stands in a nice dry cellar, which is above the freezing point all the time. It made no difference, as they died as badly in the cellar as on the summer stands. Have about 20 stands left, out of 70, and expect to lose half of these. Bees are nearly all dead in this neighborhood.

George Cole, of Freeport, Ind., writes:

The hard winter has made sad havoc with my bees. Seven out of ten colonies are dead, that were left on their summer stands. Where packed in chaff or in cellar they have done somewhat better. The old log gum and box hive men have lost the most, while those that used improved hives and read the bee journals did the best.

E. H. Sherwood, of Fishkill, N. Y., writes May 4th:

My bees were wintered in two cellars connected by a door which was left open. In the cellar under the kitchen, where a fire was kept night and day, the bees wintered best, and came out strongest and dryest, with the fewest dead bees. Had ventilator in chimney under bed-room open nearly all winter. Cellars have cement bottoms, but during thaws water came in and stood for a few days at a time in a part of each cellar. Put in 138 colonies, all of which wintered safely, except 4 that died in March. Average temperature of cellar, 45°.

J. W. Carroll, of Grafton, West Va., under date of May 17th, says:

I have successfully wintered 17 stands of bees (all I had) by the following arrangement: I wrapped the hives in two thicknesses of paper and two thicknesses of carpet. I then put a box on top of frames, two inches deep, six inches wide and 12 inches long, with glass in the top, so that the bees could pass from all the frames to the box. I then covered well with woolen cloths to keep them warm, and absorb the dampness. I have wintered my bees in this way for eight years and have not lost a colony. I use the American hive altogether. The frames of other hives are too shallow to suit me, for this climate. My opinion is that hives should be weighted down so that the wind will not shake them and disturb the bees. I lost 3 out of 5 one winter by setting them against a shaky, plank fence. I always winter on summer stands and fasten the hives down securely.

One-half of the bees in this neighborhood, so far as I have learned, are dead.

L. W. Lewis, of West Chester, Pa., writes us as follows, April 20th:

I have kept bees six years, and lost very few until this winter. Think very cold weather and uncapped, thin, raw honey, the cause of my loss, in connection with too much pollen, which gave my bees the dysentery. I notice that the colonies that had the most pollen got the dysentery the worst, Some of the hives that were smeared the most, and "petered out," had four or five frames filled with heavy, sour pollen. Good stores are the main thing in successful wintering.

S. E. Thompson, Vienna, Md., writes April 26th:

I put 57 colonies in winter quarters, on summer stands, and lost 20 during the winter. My bees were kept in a very careless way, the hives being very open and rotten; yet my loss has not been as great as that of many who had fixed their bees up very nicely.

Jacob Shively, of Anderson, Ross county, O., writes May 2d:

Put eleven colonies in winter quarters on summer stands. Lost two colonies in February. The rest were very much weakened after passing through the long

winters, but by careful cleansing and stimulating them by feeding as early as the weather would permit, they are all doing well, and are in pretty good working condition.

James C. Wilson, of New Concord, O, under date of April 25th, writes:

I am an old bee-keeper. I am sixty-six years old, and have been a bee-keeper all my life. I kept my father's bees and have been keeping bees on my own hook for fifty years. My severe loss the past winter (55 out of 83) does not discourage me in the least. I am used to it, for in the time of the old gum hive I have wintered as many as eighty-seven stands all right through the winter, and did not have a single new swarm the next summer, and the following winter lost all but five. My loss this winter was caused by my shed being open to the south and the sun shining on the box and warming the bees inside when it was freezing on the outside, causing them to fly and drop in the snow and perish. I kept straw before them, but they would drop outside, and by this means the swarms were reduced to too few bees to keep up the necessary animal heat in the hive, and so they perished. I will remedy this hereafter by making a box three inches larger on all sides than the hive, and filling it with chaff; then it will keep out both sun and cold.

Editor's Corner.

We are making efforts to obtain full reports of the honey crop in California, and if we succeed will give them in the next number of the INSTRUCTOR.

Chas. H. Lake desires to call the attention of breeders to the fine Italian queens he is now importing. His "ad." will be fond in this issue, and fuller particulars will be furnished upon application to him.

Hiram Roop, of Carson City, Mich., has presented us with one of his "Winter Protector" hives, which looks as tho' it would be an excellent one for a cold climate. We will say more about it after testing it thoroughly.

Friend Chas. H. Lake, of Baltimore, Md., has recently sent us some very nice photographs of his "Old Reliable" bee hive. Friend L. claims to have discovered the secret of successful wintering, and says that he is now trying to bring his plan within the means of every bee-keeper. We wish him unbounded success in his experiments.

It would gratify us very much to see our readers take more interest in the "Question Box." That department was started for the benefit of all of our patrons, and especially for the benefit of those whose apicultural knowledge is limited, and we would like to see them make the most of it. Don't be afraid that you will swamp Mr. Wright with questions. It's just fun for him (eh? Friend W.), and the more you send the better he likes it. There are circumstances continually happening, and questions arising, which puzzle many bee-keepers, and the "Question Box" is ready to answer all such questions, if possible, if bee-keepers will only take the trouble to ask them.

Send on your questions, by all means.

One of our agents recently wrote to us to know if we would allow him any commission for soliciting advertisements for the INSTRUCTOR. Of course we answered him in the affirmative, for we desire to pay our friends well for whatever they may do for us. We will allow all of our agents, or anyone who may procure any advertising for the INSTRUCTOR, 25 per cent. commission on all advertising they may send us, said commission to be deducted from the advertising bill, when paid, and the balance forwarded to us. When the advertising is not paid for in advance, the agent will be held responsible for the amount—less his commission—which *must* be paid by the time the advertising contract is ended.

It is is understood, however, that no one will be at liberty to deduct the commission from any advertising for themselves that they may send us—as some of our agents have wanted to do with their subscriptions to the INSTRUCTOR.

We can heartily recommend "Our Home and Science Gossip" to our readers as possessing all the qualifications of a first-class home paper, and welcome it to our exchange list. The following subjects are taken up and discussed each month: Flowers and Plants, Concology, Mineralogy, Zoology, Ornithology, Ento-

mology, Fruit and Fruit Growing, Health and Hygeine, Household Hints, Museums and Collections, Art and Decoration, Astronomy, The Microscope, Cosmography, Literary, Anthropology, Numismatics, Farm and Stock, The Apiary. Besides this large curriculum there is contained in each number a large amount of general valuable reading. It is a very valuable publication. The series of papers on "Cosmography," or the formation and origin of the world, the first of which was published in the May number, are alone worth many times the price of the magazine. Valuable articles on Geology also appear in it each month. Subscription price is $1.00 per annum. Published by Andrus & Illingsworth, Lock drawer 2,605, Rockford, Ill.

JULY AND AUGUST MANAGEMENT.

During these months watch constantly that no colonies become queenless. No colony should be without a queen for a day if it can be helped. If your bees swarm you should, if possible, supply the old hive at once with a fertile queen, and not wait, unless your stock is very choice, for a queen to hatch and be fertilized. Keep all colonies strong by feeding late in the evening, if pasturage fails. During a dearth of honey bees are cross and should be well smoked before handling. Should the honey flow cease during August and any combs become empty, put them in the center of the hive for brood rearing, as this month and the next is the time to begin to prepare for winter by the rearing of brood and filling up with stores. August is a good month for Italianizing, as queens are cheap, and a good prolific young queen put in a colony this month will generally breed up strong for winter.

THE HONEY PROSPECT IN THIS PART OF THE STATE.

Up to the first of this month bees were doing remarkably well, taking into consideration the general weak condition of colonies in the early spring. And while we have heard of no excessive yields, a pretty fair amount of surplus has been stored, while colonies have been increased to a limited extent. There has not been any excessive swarming like we hear of in some sections of the country. Bees everywhere so far as we have heard are in good condition, but how long this will continue we cannot tell, as we are now suffering from a severe drouth, which, if it lasts much longer, is going to play havoc with our honey prospects. The white clover is dead, *and dying*; basswood bloom has dried up, and the chestnut, of which we have but little, is about gone. The present indications are that bees will barely gather enough honey for awhile to keep them. Should we have good rains soon we may have a small second crop of white clover. Our main dependance, however, for the rest of the season, will be on fall flowers and buckwheat. So far the season has been satisfactory. How it will wind up is yet to be seen.

A MERITORIOUS FIRM.

Bee-keepers should be, and are as a rule, we think, lovers of good books, and it is with pleasure that we call their attention to a firm that has done more in the three years of its existence to popularize and cheapen standard, solid literature, than any other publishing house that ever existed. We refer to the "American Book Exchange," whose characteristic advertisement will be found elsewhere. This firm publishes nothing but standard works—works of real merit, by the most celebrated authors of ancient and modern times—and furnishes them at such unheard-of low prices that many people, accustomed to the high prices of the old millionaire publishing houses, can hardly believe that it is possible for books to be printed and sold at such prices, and are tempted to regard the firm as swindlers. But we speak from experience when we say that there is no more reliable house in the country to deal with, and that everyone can rely upon their promises being carried out to the letter. We have purchased quite a number of works from them, and in no instance has their representations been at fault.

We give them this notice entirely unsolicited, because we think that an enterprise that is doing so much for the people deserves all the encouragement and help that can be given it, and would advise all of our friends of literary tastes to send to the firm for a complete catalogue of their publications, which will be sent free upon application.

CLIPPING THE QUEEN'S WING.

A bee-keeper writes to us as follows concerning clipping queens' wings:

"A leading bee-keeper here tried clipping the wings of the queen to prevent swarming, but they came out five times. The queen was

put back into the hive each time and after so many efforts gave it up. He thinks another season he will give this way a thorough trial. In the meantime who has tried this, and with what result?"

Our friend seems to have entirely mistaken the object to be attained by clipping the queen. Some bee-keepers make a practice of clipping one wing of their queens to prevent them from absconding, as your swarm did. The queen not being able to fly will be found near the hive and can be returned to the old hive, when the swarm will return; or the queen can be placed in a new hive, and the bees can be hived with her without further trouble. Clipping a wing of the queen has nothing to do with checking the swarming fever; it simply enables us to have things, partly, at least, our way, instead of allowing the bees to have it all their way. If, under such circumstances, a swarm issues and you do not wish to form a new colony, you should return the queen and swarm, cut out the queen cells, and take a frame or two of bees and brood from them and give to some weak colony, if you have any. If you have no such weak colony or nucleus, you had better allow your bees to "swarm," or else draw a nucleus. If you have a clipped queen and desire to let your bees swarm, remove the old hive a few rods away, as soon as the swarm issues, and put the new hive in its stead. Then hunt the queen *carefully*, and place her in the new hive and see that she remains there, and the work is done. The bees will speedily return to the queen, and in this way your bees are hived with but little trouble. About the only objection to this plan is the danger of killing the queen in hunting for her. This must be done cautiously, for by "making haste slowly" we can generally find her by the bees commencing to cluster on the ground where she is. The bees in the old hive being mostly young will not be inclined to return to their old location, but will readily accept the new order of things, especially if a board is leaned against the front of the hive for a day or so. Where the wing of a queen is clipped the hive should be so arranged that she can crawl back into the hive if you should not be present when the swarm issues, or should fail, if present, to find the queen and return her to the hive.

STOP THE LEAKS.

In bee-keeping, as in every other branch of industry, economy is necessary if we wish to obtain the highest results from the money and time expended. By economy we do not mean what is often falsely called economy—stinting and denying the personal man—but that we should utilize everything possible about the apiary, and allow nothing to go to waste. In short, to express our meaning in a few words, we should "look after the corners." Judging from their actions, many bee-keepers do not seem to realize that an apiary should be conducted on the same principles as any other business. If they have, for instance, a lot of empty combs, they allow them to lay around where the moths can get at and destroy them, and then when needed they are useless, and the apiarist has to buy foundation, or let the bees build their own combs—which is rather an expensive proceeding. Foundation is a very good thing in its place, but when a bee-keeper will carelessly allow good combs (which are better than *any* foundation) to go to waste, and then spend his hard-earned money for foundation, it shows that there is quite a leak somewhere, which needs prompt closing up.

Another leak, and perhaps the most universal one, is careless management and neglect. Some bee-keepers seem to think that bees "work for nothing and board themselves," and care for themselves, too, in the bargain, and the consequence is that they (both bee-keepers and bees) often come out at the little end of the horn; and the bee-keeper says that "bee-keeping don't pay." Of course it don't under such circumstances. Others have too much outside business to attend to, and therefore neglect their bees; while still others allow them to increase beyond their ability to manage successfully, and the natural consequence is that all of them are only half cared for, and only do half as well as they might and *should*. This is all wrong. If an apiarist can't care properly for two hundred colonies, he should only keep a hundred; if he can't care for a hundred properly, he should keep fifty; if he can't attend properly to even fifty, he should keep a still less number. He should see that what he *does* keep, even if only a small number, have proper care and attention, and it will be found better in the long run than keeping a large number and letting them take care of themselves. "Whatever is worth doing at all, is worth doing well," is a maxim that bee-keepers will do well to remember.

Honey and Beeswax Markets.

REPORTED FOR THE INSTRUCTOR.

BOSTON, July 6.

Honey—Old is all out of market. Best new will be in demand in early fall at full prices—20@25c. CROCKER & BLAKE.

CINCINNATI, July 5.

Honey—Is in slow demand, and prices nominal. Extracted brings 6@9c on arrival. No demand for comb honey.

Beeswax—20@22c. C. F. MUTH.

CHICAGO, July 6.

Honey—Not anything doing in comb honey, at present, to speak of. A little is selling occasionally, but not enough to quote as a market. The new crop is not yet offered. Extracted steady at 8@9c, with moderate demand. R. A. BURNETT.

NEW YORK, July 6.

Honey—We quote as follows: Best white comb 2 lb boxes, 12 to crate, 16@17c, fair white comb in 2 lb boxes, 12 to crate, 14@15c; buckwheat in 2 lb boxes, 12 to crate, 10@12c. Best white extracted, 9@10c; dark, 7@8c.

We have no new honey to quote as yet. New comb honey either white or dark, in 1 lb boxes, 24 to crate, will bring good prices.

Beeswax—Is selling at 23½@24½c per lb for choice yellow.

H. K. & F. B. THURBER & CO.

ST. LOUIS, July 6.

Honey—We quote to-day a very dull honey market, and sales only can be made in a limited way. The trade will be dull for a couple of months now, and we advise parties who are prepared to hold to do so. Good extracted in barrels worth 6@8c, packages included and weight of package deducted. Clear new extracted in cans, 8@10c, according to color. Choice comb in cases, 10@12c.

Beeswax—Prime yellow, 21c.

R. C. GREER & CO.