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VOL. IV.

AUGUST, 1882.

NO. 8.

THE
BEE-KEEPERS'

INSTRUCTOR.



A MONTHLY JOURNAL

Devoted to the Science of Bee-Keeping in All its Branches.

Webster Thomas, Editor.

WEBSTER THOMAS & SONS,
PUBLISHERS AND PROPRIETORS,

SOMERSET, KENTUCKY.

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\$1.00; 6 for \$5.00. Tested Italian queens, after June, \$1.50. Send for circular.

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THE Bee-Keepers' Instructor.

Devoted to Practical Bee-Keeping in All Its Branches.

VOL. IV.

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NO. 8.

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{ Terms, 50c. per year,
{ or 30c. for 6 months.

Our Contributors.

For the Bee-Keepers' Instructor.

Jottings.

O. O. POPPLETON.

The July number of the INSTRUCTOR is just received, and I would like to call special attention to some ideas in it.

I do not think friend Heddon, when he spoke as he did about the “ring business,” intended to be as contemptuous as he was toward some of us who differ from him about the desirability of color in bees. His way of speaking would indicate that he thinks we pay attention to the rings for the sake of the rings themselves, and not for those qualities which the presence of those rings denote.

Does Mr. H. mean that it is neither “a hard or impracticable task” to prevent his undesirable colonies from rearing any drones at all, or simply to prevent their building much drone comb? If he meant the first, I will have to differ from him quite decidedly, for I have found it a very hard and impracticable task in a large apiary run for honey only.

I entirely agree with Mr. H. in his opinion that “extra prolificness is of no value.” This is the first time I remember having seen that statement made by any writer, but having already given my reasons for that opinion in the *American Bee Journal*, will not repeat.

I have often been tempted to ask the same question, and ask it very pointedly too, that Mr. H. asks: “Does anybody know whether queens reared from cells built under the swarming impulse are better for all purposes than are those raised from forced cells?” I confess that I don't know anything about this, and I wish such successful honey raisers as L. C. Root, Doolittle and others would tell us what they do know about this matter.

Also tell us whether queens raised for the purpose of superseding old queens are as good as others.

What is the proper temperature for queen cells between sealing up and hatching time? Mr. Heddon says 75° F. Mr. A. I. Root says from 80° to 100°. A. G. Hill in last *Guide* says in effect that “more vigorous queens are produced when the temperature is lower after cells are sealed than it was before.” Now, what are the facts?

Mr. Heddon's remarks about dollar queens, except those about sending them through the mails, meet my views the best of anything I have yet seen. I go farther than he does, however, in that I allow no one but myself to test my breeding queens. I do not breed from any queen until I have tested her at least one season, not only for color of bees (which Mr. H. cares nothing about), but for such other qualities as I want my bees to possess. I can not afford to pay some one for doing the useless work of testing my queens for me, and at the same time lose one season's use of them.

Mr. De Freest, on page 101, makes a mistake which is entirely too common with writers for our journals. Why, bless you, friend D., the whole science and practice of bee-keeping would be in perfect chaos and confusion, if our experimenters, teachers and practical apiarists would allow themselves to form such decided opinions on such insignificant experience as you seem to have had with dollar queens and Italian bees. The editorial remarks following meet my entire approval.

Mr. Wright on page 102 has incidentally stated what I believe is a fact, that the introduction of a young queen in place of an old one in a populous colony before commencement of the honey season is a very great preventative of swarming. It seems to me that producers of comb honey could use this fact to great

advantage in their business.

Friend Doolittle, in his remarks, page 105, on his want of success in wintering, makes a good point in saying that it is better to make two dollars by losing his bees and buying anew, than to make one by wintering successfully. The method of management that makes the most in the long run, with the same outlay of capital and labor, is of course the best; still, I have very great doubts about the wisdom of risking the adoption of a system of management that necessarily carries with it the probability of heavy winter losses, and doubt its paying best in the long run. I have noticed for several winters past that my heaviest losses were among those colonies from which the surplus was obtained at the sides or top of brood nest, and my best success with those from which I had obtained the surplus from the brood combs themselves. This has been so decidedly the case that I am now working every colony in my apiary except one on the latter plan.

I see by your editorial on page 106 that you are being converted to a belief in the superiority of dark bees. In my opinion this whole question of color is more one of different management than of different bees. While every season confirms my belief that the light-colored bees contain the most valuable traits for my use, yet I do not doubt but the dark ones are the most reliable to men whose system of management like Heddon's, Dadant's and others is almost directly opposite to my own. Those who obtain their surplus as I do, from the body of the hive, will, I think, find the light ones much the best. Until some of these advocates of dark bees can show a better average report for a series of years than I can, I am afraid I shall remain what Artemas Ward called "a contrary cuss," and stick to my own opinion.

Williamstown, Iowa, July 24, 1882.

For the Bee-Keepers' Instructor.

Hints for the Inexperienced.

J. E. POND, JR.

When increasing warmth and lengthening days foreshadow the close of a dreary winter and the beginning of early spring, the queen in a well preserved colony begins to deposit her eggs; slowly at first and in a small circle, gradually increasing with warmer weather, and the growing strength of the swarm, until at last she fills all the empty cells within the limit of the cluster. The first brood will

appear in about 21 days, and when hatched will not only leave empty cells to be again replenished by the queen, but will by increase of numbers add to the strength of the hive, and the number of frames contained within the enlarging cluster.

By this means, if the queen is ordinarily prolific and stores in plenty are contained in the hive, the colony will become sufficiently strong to take advantage of the first yield of honey from fruit bloom. If, however, upon an early examination it is found that the hive is deficient in stores, stimulative feeding will be necessary, in order that a sufficient quantity of brood may be produced to replenish, keep up and maintain the strength of the colony.

As bees older than 10 or 12 days are poor nurses and comb-builders, it is essentially necessary in order that the full working force of the colony may be economized, and that brood be constantly produced from early spring until late fall: thus the greatest amount of honey will be gathered, or the older bees will have nothing to do in the way of house-work, and as they die off from old age or severe physical exertion, their places are constantly replenished by their younger sisters, who can equally as well gather stores, and more safely pass the rigors of a severe and prolonged winter term.

In making artificial swarms, a matter which is too often overlooked should be carefully kept in mind, and that is, old bees gather honey and young ones act as comb-builders, consequently a swarm should be composed of both old and young bees, for if composed entirely of old ones it is not nearly as effective, and is liable to dwindle down to almost nothing, before brood is hatched to take their places.

As white clover is the main stay, the great resource from which our honey is obtained, and as its season is of short duration, it behooves us to be ready with strong colonies to take the utmost advantage of it when it comes into bloom, having our hives well filled with old bees to gather, and young ones to build cells in which to store the honey; also, to nurse the larva, which ere long will be changed into brood to take the places of both. As bees require a great amount of heat in order to carry on their labors, it is exceedingly important that they should be kept in such a condition that they can economize the same, as such heat is largely desired from, and maintained by, physical exertion on their part. This can most easily be done by the use of division boards, contracting or enlarging space in the hive in proper proportion to the size

of the colony occupying it. By contracting in cold weather or when the swarm is small, and enlarging as the size increases, the correct proportion can be maintained with very little trouble. A judicious addition of empty frames of comb or foundation from time to time as the colony increases in size, can be done by simply moving these division boards so that the frames can be accommodated, and the bees will by their use be prevented from being discouraged by having too large a hive, and will have plenty of room in which to work when the same is needed. The old rule was, "make your swarms early," but experience has taught me that it is an error, and the rule I follow is to strengthen up my weak swarms early, till all are in good condition, then if I desire and the season is such as to warrant it, I am in proper shape, by the aid of foundation, and a frame or two of brood, to make strong swarms that are at once ready to go into the fields, and also attend to the home duties and labors of the hive. By seeing that all colonies are made strong and as nearly as possible uniform in strength in the early part of the season, we shall be enabled to make such new swarms by artificial means as the honey yield will warrant, and thus keep up the number of hives to any desired standard, and still get the largest amount of surplus which can be produced in a given season. Were swarming not necessary (the only means which nature has provided to prevent the honey-bee from becoming exterminated), we might go on from year to year, making no new colonies, nor allowing them to issue, and thus perhaps obtain enormous crops of surplus, but as the bees themselves, when their hive is filled with brood and honey, will almost invariably swarm out, unless great pains are taken to prevent, we must allow increase to a certain extent. That extent, however, must be governed wholly by the season itself and the amount of honey which we judge will probably be gathered.

In order that we may intelligently determine the amount of increase compatible with the greatest gain of surplus, and be enabled to forestall the season as far as possible, we must intimately acquaint ourselves with the entire flora of the locality of the apiary, the amount of its production, and the season of its bloom; thus only can we judge rightly when to put on or remove our sections, or to extract and discontinue the same, and further decide when the lack of stores in the field may make it necessary for us to feed in order to stimulate production of

brood and keep our colonies up to their full strength.

When shortening days forewarn us that cold weather is about approaching, we must at once look over our colonies and see that all are strong in stores, and that a large quantity of young bees are either just coming out, or will soon do so, and having ascertained that fact, or taken means to remedy it if a contrary state of things exist, then we must carefully prepare our hives so that the occupants thereof may safely withstand a possibly long and rigorous winter. This article is already too long to allow me to give my views in regard to preparation for winter, but some of the many plans approved by bee-keepers of experience, and which have been fully set forth in the various bee journals, can be followed: none of them perhaps with absolute safety, the particular locality determining to a great extent the particular plan to follow; but preparation of some kind should certainly be made to protect our hives from severe cold, and shield them from wintry blasts.

Foxboro, Mass., July, 1882.

For the Bee-Keepers' Instructor.

Prolific Queens, etc.

JAMES HEDDON.

"I want a very prolific queen." "Mr. Gallup and Mr. Adair and other leading bee-keepers say that the more prolific the queen the more she is worth." Such expressions as these are quite common.

Well, what is the object in a *very* prolific queen? The answer always comes, "to produce the greatest number of workers." Let us look into the matter:

If one is *buying* queens, they cost from one to three dollars each. What is the purpose of these purchases? Most assuredly to change the *quality* and not the quantity of the workers. When the apiary is satisfactorily stocked with the preferred blood, then one allows his bees to rear their own queens, and they cost not to exceed 25c. each if the bee-keeper is by selection improving his stock, and if not, not to exceed 2c. each. Now, "to get honey we want to get bees," and to get bees we must invest capital in queens, combs, hives, yard, and necessary fixtures. Allowing that the queen costs the one who produces her for his own use 25c., and all the other fixtures for every 30,000 workers \$2.50, we see at once that it makes but little difference whether we have extra prolific queens or not.

I do not want it understood that I ap-

prove of any queen that is abnormally unprolific, for such is not the case. I behead all such as soon as I find them. But right here I want to say that since I quit the encouragement of abnormally prolific queens, I hardly ever find one of the former class. I believe that there is a law in nature that covers the fecundity of queens, that the more the quantity (above the normal amount) the poorer the quality.

Gallup and Adair said, "have extra prolific queens, put each one in a hive containing 30 combs, then shift the combs every few days, and make her keep them full of brood." I tried it—to my complete satisfaction. I found that this method demanded an amount of labor, the value of which would pay the interest at 20 per cent., twice over, on every dollar invested in the capital. So I just cut these large, long hives up, making three out of each one, and divided those 30 combs among these hives, and reared two more queens. Now each queen kept her ten combs chuck full of brood without any "horse-whipping" whatever, and my colonies became automatic as far as breeding was concerned.

"Keep your colonies strong" has been laid down as a golden rule. That is right. Keep your combs and the capital that surrounds them, in use. But don't try to make me believe that we cannot get just as much honey, proportionately, from a pint of bees and two combs, as from five quarts and twenty combs. We know by actual demonstration that we can. We have gotten just as much surplus honey from our nuclei this season, in proportion to the size of the hive and colony, as from the full colonies in large hives. In fact, I think more. It seems so.

QUALITY VS. COLOR.

I am glad, Mr. Editor, to have you come out in favor of "handsome is that handsome does," and breeding bees for qualities and not color. Our crosses between the long, leather-colored Italians, and the brown Germans, are improving all the time under our care in breeding in the good and out the poorer qualities, and to-day we have the best bees we have ever seen—bees that we feel proud of. I think from your description in your editorial in last issue that you have the same sort of bees in your "bluish tinged" colony. That these bees are the best natured of any known, one has only to become acquainted with them to know. All who visit them here go away with the same impressions that Mr. Clarke did, as he

reports in last week's *American Bee Journal*. I gave him a queen, that he might know them further, and I look for even a more flattering report for these bees as soon as Mr. Clarke gets his queen tested.

QUEENS BY MAIL.

I agree with you that the P. O. department carries queens cheaper and goes to places where the express companies do not, but that does not prove that the mail bag does not kill lots of queens, and damage many more that arrive alive, and are supposed to be all right because alive and looking well. It is my opinion that any system of shipping bees that will kill so large a proportion of them as this mailing system does, must seriously injure, for life, many that are received in apparently good condition, and successfully introduced into colonies that have been deprived of a better queen a few hours previous. We have shipped queens this season in the improved provisioned Peet mailing cages, using them both with and without tin water bottles, and have lost at least one-third of our queens, one dying that was sent but 60 miles, direct on this railroad. I say once more, mail bags are no place for bees, in my opinion. People are going crazy about mails. They ask if bees by the lb. cannot be sent by mail. Are customers willing to have queens mailed to them, entirely at their risk, in any cage that they may mention? Not a bit of it. "Actions speak louder than words."

Once I bought 25 colonies of bees of Mr. — about 150 miles from here. It was in early May. "You need wire cloth all over the entire top," I said, "for this season of the year." "Pshaw," said he, "if I warrant safe arrival aint that all you can ask?" "Yes," said I. "I have shipped many hundred colonies," said he, "and I know these few auger holes are all that are needed." The bees came, apparently in good order. I paid for them, and put them in an out apiary with 25 of my own colonies. When they arrived they were as strong as my own colonies, but when mine began to swarm these 25 colonies were no stronger than on arrival. I was nonplussed. I could not then solve the problem. It is one of easy solution at the present time. These bees had so little ventilation that a degree of heat was generated that called for water, in want of which the bees devoured all their larva.

Full colonies of bees are to-day as safely transportable as a box of lemons, provided they are properly packed and decently handled. We pad the back and

bottom of the hive, and put a large roll of dripping wet rags in the top of every hive, and if the weather is warm and brood is in the hive, we cover the *entire top* with a wire cloth frame, 2 inches in height. Of many hundreds of colonies we have shipped, not one has ever been lost and only five damaged. One had one comb broken down (which was readily replaced), and four were, owing to a mistake in the purchaser, misdirected, and were just 2 weeks getting 200 miles. After being opened they were gathering pollen in less than an hour. The damage sustained was one less swarm each (they cast one swarm each, as it was), because they devoured all their larva as soon as the water was gone.

The foregoing and many other experiments made with bees, by us, forces me to believe that mail bags are not the best places to transport bees. 25c. is the usual charge for carrying queens almost any distance, and in order to compete with the P. O. department the express companies take these small packages over the lines of two companies for the one price. If several queens are sent at once the charges are nominal, and if only one, the whole cost is only from 10 to 25 per cent. more; and I would rather receive a queen alive by express at \$1.50 than alive by mail at \$1.00. The mailing system demands little pinched-up cages, with the candy so hard as to be nearly worthless, or soft enough to get loose in the cage and rattle about and kill the bees. Mail bags are often laid in the scorching sun for hours, and in such cases a degree of heat is generated that must so affect a queen as to ruin her high qualities forever. Mail bags are often thrown down with great violence, too, the queens thereby running much risk of injury. I don't want to introduce any queens into my apiary that have come through the mail, and take the risk, and I don't propose to sell what I am not willing to use. During the Summer months we have in most parts of our country some cool nights, to which mail bags are exposed, that will chill a queen to the serious injury of her fertility.

It is my opinion that damages arising from this mailing system will account for most of the altercations that have arisen between purchasers and vendors of queens. I shall not ship another queen by mail, until I have good cause to change my present views, unless the purchasers demand them so sent, at their own risk. I notice that of two of our most reliable supply dealers, one says he will not warrant the safe arrival of

queens after June, when sent a distance exceeding a thousand miles, while the other will not warrant safe arrival at all.

I think that in proper cages, by express, bees can be transported with almost universal safety, and then no guarantee of safe arrival will be needed, while the loop-hole through which the dishonest might get two queens for the price of one, will be closed.

Dowagiac, Mich., July 31, 1882.

Probably you have met with more than ordinary losses, friend H., in shipping queens by mail. At any rate your loss has been much larger than some, for by referring to an article on page 37 of the March number of the present volume of the INSTRUCTOR, it will be seen that out of 268 queens sold by Mr. D. A. Pike last season, only one was lost. This is very likely an exceptional case, but then we think yours is also, and that the proportion of queens lost out of the total number sent by mail, is not nearly one-third. But as there is nothing like facts in such cases, we would like to hear from some more of the queen-breeding brethren on the subject.

For the Bee-Keepers' Instructor.

Dollar and Tested Queens.

J. KLINGER.

I see there is still a little sparring on queen raising, and as I have raised a few queens I too must speak my piece. The idea is held forth in the INSTRUCTOR that dollar queens (for so the untested queens are sometimes called) are not as long-lived as the tested, and that they are usually worthless. It may indeed be that the dollar queens of some parties are worthless and even known to be worthless by the parties selling them, for they may have tested them, and finding them worthless may be the more ready to sell them for a dollar than to pinch their heads off. But I can see no good reason for doing so, because that would soon stop the dollar queen trade, and it is my experience that it is more profitable to raise untested queens for a dollar than tested queens for two dollars. In sixteen days we raise a queen from the egg, and

if the weather is fair, in five days more she becomes fertile, as a rule, and is ready to ship. So we see that in twenty-one days we can raise a crop of dollar queens. But if we must test them we can not raise them in twice that time. Five days usually elapses before a fertile queen lays an egg, and then we must wait twenty-one days before her workers hatch out, and after this must wait several days before we can well tell how she breeds, so that about thirty days more are required to produce a tested queen than for an untested one. In a good season we can only raise one crop of tested queens, which takes about sixty days. In this time we could raise at least two crops of untested queens. Usually we lose more than the difference of price in honey, for the bees that raise a queen would in those thirty days it requires to test a queen gather more than a dollar's worth of honey, if the season is good. I can see no reason why an untested queen should be shorter lived than a tested one, and may be just as pure stock as the tested queen, but it is not known until tested. For all I know that disputed point as to whether queens copulate more than once or whether if once fertile they remain fertile for life, I could not certainly say. I know that I now have a three-year-old queen producing just as fine bees as ever, and I am so surrounded with black bees on all sides that it is a mere accident if I succeed in raising a pure Italian queen.

Another question raised in the last number of the INSTRUCTOR is, why do bee-keepers keep any black bees if the Italians are a better worker? Well, I do not know that as a rule such is the case. I do not propose to raise queens to sell, and yet I try to keep all my bees as pure Italians as I can, and I know two other bee-keepers not far from here who do the same thing, and they raise no queens to sell. We all are getting honey pretty plentifully, while some of our neighbors who keep only black bees are making but little honey. Honey is very fine, so thick that I could not get it to run through my Gaspice extractor.

Early spring here promised well for honey. The 10th of May I had a swarm to come out, but it went back again. Then bees had become strong, when there came a cold snap, thus cutting off the supply of honey. Bee-keepers had to feed to save their bees, the colonies being too large for the amount of provision in store. Some starved outright before they could gather any supplies. It came, too, at a time when not many thought of feeding any more. But since then we have

had an abundance of white clover and linn, and still have. But the clover does not yield as well as early in the season. I have doubled my stocks of bees, and taken an average of 40 pounds of honey from those I started with in the spring.

Upper Sandusky, O., July 25, 1882.

The dollar queen subject has been so thoroughly discussed that we must decline publishing any more communications on the subject, unless some new ideas are advanced, or points taken up that have not yet been discussed. Whether this be possible, however, we much doubt, as the subject has been treated from almost every imaginable standpoint.

For the Bee-keepers' Instructor.

The Tri-State Fair, Toledo, Ohio.

A. B. MASON.

This fair begins Sept. 4th and continues until the 16th. Entries can be made so that the exhibit begins on the 4th, or they may be made up to six o'clock p. m., Sept. 12th. There is no charge for entries. The Association opens a traffic department this year as an experiment, the "object of which is to enable all who arrange an exhibit to introduce all meritorious products in their line into immediate and general consumption, not only making the week" (or rather two weeks) "one of sight-seeing and recreation, but of profit to both exhibitor and visitor." Any exhibitor having honey or apiarian supplies in any quantity to sell "can, for a reasonable rent, offer for direct sale on the grounds, all manufactured wares of merit, or take orders for future delivery, under such rules and regulations as will guarantee square dealing and protect both buyer and seller." I am not financially interested in the fair association, but am anxious that the bee-keeping fraternity shall make a creditable exhibit, not only of articles entered for premiums, but also of articles used in our specialty, in large quantities for sale on the grounds. Let all who intend to exhibit, and those intending to enter the traffic department, make *early* application, so that ample room may be provided. From five to ten cents will take a person by street cars from almost any depot in the city to within a short distance of the grounds.

Every bee-keeper, but one, that I have consulted, is desirous of organizing a Tri-State Bee-Keepers' Association during the fair, to hold its meetings annually while the fair is in progress, and it is suggested that the meeting for organizing be held on the fair grounds Wednesday afternoon, Sept. 13th, and then hold one or more sessions each day during the week. We hope to induce the editors of the *American Bee Journal* and *Gleanings*, also Prof. Cook and other well-known apiarists, to be present and aid in organizing such an association and gives us talks on our specialty, and hope to make the occasion so interesting and profitable that bee-keepers will find it to their advantage to be present.

Reduced rates for passengers and freight have been secured on all roads entering the city, information in regard to which, with rules and regulations and entry blanks of the fair association, will be furnished free on addressing the Secretary, John Farley, Toledo, Ohio, or myself at the address given below.

There is some prospect of getting permission for such bee-keepers as may wish to do so to bring tents and camp on the fair grounds, thus reducing very materially the expense of a one or two weeks' stay. I will answer any inquiries in regard to tents as soon as the association decides the matter.

Wagon Works, Ohio, July 29, 1882.

Below is the premium list of the apicultural department of the fair, of which Dr. Mason is Superintendent. The list, as will be noticed, is quite lengthy—more so than any we recollect of ever seeing in a fair catalogue—and although the premiums are rather small, bee-keepers, especially those in Northern Ohio, should do all they can to make the exhibition creditable and interesting, as that is the way to secure more liberable premiums another year, and is one of the very best methods of bringing apicultural products into general use and notice. A good apiarian department, rightly conducted, forms one of the most attractive features at a fair, and managers are not slow in discovering and appreciating this fact. The Tri-State Fair is fortunate in having at the head of its apiarian department a man so well

fitted for the position as Dr. Mason, and we are sure that nothing will be left undone on his part to make this portion of the fair a complete success:

PREMIUM LIST.

- Best comb honey in most marketable shape, not less than 20 lbs., 1st Prem., \$4.00; 2d Prem., \$2.00.
- Best extracted honey in most marketable shape, not less than 20 lbs., 1st Prem., \$4.00; 2d Prem., \$2.00.
- Best crate comb honey in most marketable shape, 1st Prem., \$4.00; 2d Prem., \$2.00.
- Best display comb honey in most marketable shape, product of one apiary during 1882, 1st Prem., \$5.00; 2d Prem., \$3.00.
- Best display extracted honey in most marketable shape, product of one apiary during 1882, 1st Prem., \$5.00; 2d Prem., \$3.00.
- Best display apiarian supplies, 1st Prem., \$5.00; 2d Prem., \$2.00.
- Best display beeswax, 1st Prem., \$2.00; 2d Prem., \$1.00.
- Best display Italian, Cyprian, or Holy Land Queens, 1st Prem., \$3.00; 2d Prem., \$2.00.
- Best Colony Italian, Cyprian or Holy Land bees, including its public manipulation, 1st Prem., \$5.00; 2d Prem., \$3.00.
- Best apparatus for making comb foundation, to include everything necessary for its manufacture, 1st Prem., \$8.00; 2d Prem., \$5.00.
- Best comb foundation, mill or press, 1st Prem., \$4.00; 2d Prem., \$2.00.
- Best honey extractor, 1st Prem., \$2.00; 2d Prem., \$1.00.
- Best bee-hive for all purposes in the apiary, 1st Prem., \$2.00; 2d Prem., \$1.00.
- Best bee-hive, glass or exhibition, 1st Prem., \$2.00; 2d Prem., \$1.00.
- Best honey vinegar not less than one gallon, 1st Prem., \$2.00; 2d Prem., \$1.00.
- Best wax extractor, 1st Prem., weekly *Bee Journal* 1 year; 2d Prem., *Gleanings in Bee Culture* 1 year.
- Best winter and summer bee-hive combined, 1st Prem., weekly *Bee Journal* 1 year; 2d Prem., *Gleanings in Bee Culture* 1 year.
- Best comb foundation for brood chamber not less than 5 lbs., 1st Prem., weekly *Bee Journal* 1 year; 2d Prem., *Gleanings in Bee Culture* 1 year.
- Best comb foundation for surplus honey, not less than 3 lbs., 1st Prem., "Cook's Manual of the Apiary;" 2d Prem., *Gleanings in Bee Culture* 1 year.

Best display of comb foundation, 1st Prem., weekly *Bee Journal* 1 year; 2d Prem., "A B C in Bee Culture."

Best one-piece section, not less than 50 sections, 1st Prem., *Gleanings in Bee Culture* 1 year; 2d Premium, BEE-KEEPERS' INSTRUCTOR 1 year.

Best dove-tailed section, not less than 50 sections, "Bees and Honey."

Best packages for extracted honey, with labels, BEE-KEEPERS' INSTRUCTOR one year.

Best bee smoker, BEE-KEEPERS' INSTRUCTOR 1 year.

Best honey knife, "Bees and Honey."

SPECIAL.

Webster Thomas & Sons, Somerset, Ky., publishers of the BEE-KEEPERS' INSTRUCTOR, offer a PURE, TESTED ITALIAN QUEEN as a special premium for the best comb honey in the most marketable shape, not less than 20 pounds,

For the Bee-Keepers' Instructor.

Bee-Keeping in North Carolina. No. 1.

R. C. TAYLOR.

I am truly sorry to note the few and meagre reports from this great old State—North Carolina—of the fraternity of bee-keepers. For this reason I shall attempt to come to the front and give you some statistics of bee-keeping in various portions of our State.

For some of these reports I am indebted to different friends through the State, and especially to our gentlemanly and efficient Commissioner of Agriculture, the Hon. L. L. Polk, of Raleigh, N. C.

In response to the following questions: 1st, What bee is kept, and which do the best—the native, Italian, Cyprian or Albino? 2d, What is the annual average yield per colony in honey and beeswax? 3d, What is the average price per pound? I received the following reports in answer:

ASHES COUNTY.—Through Mr. T. C. Worth this county reports the native bees are chiefly kept. There are some Italians that do not succeed well. Yield of honey and beeswax about 100 pounds per colony. Price of honey, 12½ cents per pound. Beeswax 25 cents per pound.

ALAMANCE COUNTY.—Has the native, Italian and hybrid—Italian preferred. Price of honey from 15 to 20 cents per pound. This report is from Mr. D. W. Kerr and Dr. W. F. Bason.

ALEXANDER COUNTY.—Mr. I. P. Matheson states that the native is the only bee

in his county. Average yield, 100 pounds of honey and 6 pounds of wax. Price per pound, honey 10 cents, wax 25 cents. Mr. W. W. Gryder, of this county, also writes that from the native bee in his locality, from 30 to 35 pounds of honey is the average, with about 4 pounds of wax. Price for honey, 10 cents, and wax 25 cents per pound.

BLADEN COUNTY.—Mr. J. W. Purdie reports that the native is the only kind of bees kept. The yield per colony is from 50 to 60 pounds. Price of honey, 8 to 10 cents, wax 25 cents.

BRUNSWICK COUNTY.—Mr. A. C. Willard answers that the native is the only bee kept; that the Italians have been tried but do not thrive well. About 25 pounds of marketable honey is made to the colony, and 2½ pounds of wax. Price of honey 20 cents, wax 25 cents.

You will notice that the report from Alexander county says that the price realized for honey is *ten cents per pound only*. In this county I am *sure* that not one bee paper or publication of kindred nature is subscribed for. The old "log gum" is the standard hive, and when you say anything of improvement they will startle you by the crabbed reply, "well, the log gum suits me. I want no change at all; if so, I will lose my luck." Well, what can one say to them? In some localities for fear of "losing their luck" they wont sell a colony of bees at any price.

In the Brunswick county report, Mr. Willard says the Italians *do not thrive well*. Now, I am acquainted, personally, with the reason why the Italians did not thrive. It was simply because only one man in the vicinity ever introduced Italian bees. This man lives here in our town—adjoining the county referred to (Brunswick)—and for years he has sold *only* weak hybrid Italians, in *very small boxes*, too small for bees to accomplish anything. These he would palm off to the Brunswick county people for *fine Italians*, and they of course perished the first winter afterward. No wonder the Italians (?) didn't thrive.

Wilmington, N. C., July 17, 1882.

We too, friend Taylor, are "truly sorry" to have so few reports from the South—including North Carolina—as we have. As we have said before, there are surely more than enough bee-keepers in the South to well support a journal of their own—one that should be particularly devoted to their interests, and to

the progress of bee-keeping in the South—and yet we are sorry to say that they do not seem to realize the good that might ensue by having such an organ, and giving to one another, through its columns, the benefit of their various experiences. Fully four-fifths of our subscribers live north of the “Mason and Dixie line,” and from the remainder who do not we scarcely ever have anything for publication. Probably no section of our country is better adapted to profitable bee-keeping than the South, and yet bee-keeping there is, as a rule, way behind the age. We regret to say this, but yet the unwelcome fact remains that is the truth. When the Italian bee is bred universally in the South instead of the black; when movable-frame hives and neat honey sections are used instead of the old box hives and log gums, and six and eight lb. surplus boxes; when the veil of superstition and ignorance that now in a great measure surrounds the business of bee-keeping shall have been cleared away, the improved methods and appliances of *modern* bee-keeping be used, and the antiquated methods and fixtures of the present be relegated to the past, *then* we may expect to see the business assume its rightful position as one of the most lucrative and profitable industries that can be engaged in. We hope the day will speedily come when these changes will be assured facts.

For the Bee-Keepers' Instructor.

Best Location for an Apiary.

E. A. THOMAS.

There are, probably, but few places that will not afford sufficient pasturage for a limited number of colonies, and bee-culture, with all its modern appliances and methods, may be made profitable in almost any locality. But while a limited number of stocks may be kept with pleasure and profit in almost any place, I would advise those who intend

making bee-culture a business to search out the best location to be found. Perhaps the following hints will prove of value in selecting a location for an apiary:

The first and most important question to be considered is natural pasturage; whether there is a variety of honey-producing flowers or not; whether each honey source is sufficient to ensure a honey crop in case of the failure of all others. I shall consider it necessary to call your attention to only three plants, which are the three principal sources of surplus, and upon which we must depend mainly. These are, raspberry, white clover and basswood or linden; and a good location should have at least two of these in abundance. If a location can be found where all three of these plants abound in profusion, each one capable of supplying a good honey crop, bee-culture may be engaged in without fear of failure, and without anticipating any danger from overstocking. Another important point in selecting a site for an apiary is to secure a continuous honey flow if possible. On this account I consider the head of a valley jutting in from the low lands between steep mountain sides and terminating at a distance of about two miles from the low lands, as the most advantageous place for a site. The foliage on the meadows will be quite early, and there should be plenty of raspberries and clovers. A location at the head of a valley has this advantage, that, while the raspberries and clovers will bloom early on the low lands, they will continue to grow later and later as we recede up the valley towards the mountains, thus affording a long and continuous flow of honey.

In addition to the plants named there are some others, which, although secondary in importance, deserve some attention, as furnishing bloom before and after the surplus honey flow. Of these mention may be made of fruit and willow bloom in spring on the meadows, which should be plentiful enough to stimulate the bees to active brood rearing; and of goldenrods and asters on the mountains, furnishing the late fall bloom, upon which the bees are sometimes obliged to depend for their winter stores.

Having selected a location where the natural pasturage is satisfactory, a succeeding step is to locate the apiary. The ground should be very nearly level, gradually sloping towards the south. This is necessary to ease in manipulating the hives. But should no such favorable spot be found at or near the place where it is desired to locate the apiary, a side hill may be neatly terraced and will pre-

sent a pretty appearance, and with hand car tracks at the back of the hives may be made very convenient.

Now a hint about searching for a location. Perhaps it may not be convenient for you to visit a place more than once, and then not at the right time of the year to judge of its resources. In this case, in addition to what information you can get regarding the honey plants, etc., it will be well to interrogate some old fogy bee-keeper in the vicinity in regard to his success. If you find that he has been very successful, you may conclude that the locality is a good one for honey, as it is reasonable to suppose that where bees that receive no attention at all are prosperous, scientific bee-culture will result in immense crops of honey, and as a sequence, in all the success that can be anticipated.

Coleraine, Mass.. Aug. 8, 1882.

From the California Apiculturist.

Extracting.

DR. S. S. BUTLER.

Extracting, when done properly, is one of the most particular kinds of work done in the apiary. If we want our honey No. 1, we must be neat and particular in all our operations with the honey brought in by the bees, which can easily be spoiled, and a great deal of it is, by the one who takes it out. Nearly all of those who have given us directions have recommended taking it out before it is sealed; also taking out honey from unsealed brood combs, from both of which propositions I beg to differ. About throwing out honey before it is sealed there has been a great deal said in the journals in the past about saving the bees the labor of capping, besides the honey taken to make the capping, etc. I am satisfied after experimenting for years, that in no other way can you get as good an article of honey as to let the *bees* ripen it. Sometime since I went to the expense of about \$50, having a large evaporator put in, which after trying for some time, getting one batch so thick as to be a great deal of trouble to strain, and another not well enough done but what it fermented, I concluded to let the bees do the ripening; it is their business and they do it to perfection, which we can not. Again, if you go over your hives about the time they begin to seal over the honey, the combs are not more than $\frac{1}{2}$ or $\frac{3}{4}$ full, and as the only quick way of getting the bees off the combs is to give the comb a jerk,

in doing so you throw out considerable honey, which attracts robbers and gives you a great deal more work than you would have, to let the bees seal it to get the same amount of honey. I never throw out any great amount of honey that is not sealed. Unsealed brood should never be put in the extractor, that is over one-quarter grown, as it is almost impossible to throw out our thick honey without throwing out some of the brood, and with it the larva food. Even if you do not turn fast enough to throw the larva out, you will throw out the thin larva food.

To illustrate: An old bee-keeper, stopping with a friend of mine, said to him, after tasting and tasting of his honey, "Didn't you put unsealed brood through the extractor." After being answered in the affirmative he said, "I knew it, for I can taste the larva food in the honey, ugh!" How much of the extracted honey in the country is entirely free from larva food? It should all be. The best method of extracting that I have seen is put forth in Dadant & Son's pamphlet. Their way will need to be modified so as to get each kind of our California honey by itself.

Los Gatos, Cal.

Letter Drawer.

Good Honey Season.

We are having a good honey season here now, only it is most too wet. Plenty of white clover. D. A. PIKE.
Smithsburg, Md., July 18, 1882.

Poor Season in Tennessee.

This has been a poor honey season, although I secured some very fine honey in May in 1 lb. sections, for which I readily got \$2.50 per case of 12 lbs. I owe my success to your little journal. I had about become disgusted with bees and patent hives, when I saw Mr. Heddon's advertisement in a stray number of your journal, and got his style of hives and sections and subscribed for the INSTRUCTOR. Naturally enough I have made some mistakes, but I can rectify them next season. S. B. MYERS.

Quality, Not Color.

You seem to be working in the right direction. The best workers and best disposition, regardless of yellow bands, is what we want. Heddon gives the right

sound when he says that the queen from which queens are to be bred "should be *put upon her merits* for at least one year" (Italics mine) before she is used for queen raising. "Put upon her merits" for energy and good disposition should go out all over the land, and if accepted by every bee-keeper the improvement in the strains of bees would be wonderful. I am with you in the belief that the dark strains of Italians are best. Like Heddon, I first sought for yellow bands, to my sorrow; now good workers and good disposition is my motto. I have two of Heddon's queens—no, only one, as one disappeared after filling a card full of eggs—but I will not report on them yet. H. C. HERSPERGER.

Keene, Ky., Aug. 14, 1882.

Queens by Mail.

Out of all the queens we have sent by mail this season, we have only had three reported dead. Of these, one was the result of an accident. We use wooden cages, with a sponge saturated with honey. Who can report a less number lost in any other cage. We lose on an average about one queen in 300 shipped in our cage. E. A. THOMAS & Co.

Coleraine, Mass., Aug. 9, 1882,

Well, really this seems to be getting better and better. In another part of this number we refer to Mr. Pike's success in shipping queens last year, he only losing one out of 268, and now friends Thomas & Co. come to the front, and report their average of loss at only one out of 300. Verily, unless some of the other queen breeders give in a much different experience, we shall have to conclude that friend Heddon has been less successful than the majority of queen breeders in shipping queens. Eh, friend H.?

The Season in California.

Our season is late and has been cool generally, with the exception of a few warm days. The honey flow has been very irregular. I have done moderately well. My bees are all Italians. Have had but little swarming as I used the extractor. Box honey has been difficult to get finished, as the nights have been very cool and at times there appears to be no honey coming in. About one-half of our sage got *froze* on the 11th and 13th of May, though not entirely killed. There

is little honey coming in now, and bees are much inclined to rob. It is a poor time to open hives. I find the brood apartment full, queen cells torn down, and but very little breeding going on. I have a considerable number of queens that were reared last year, and a few of the year before. The latter seem to be about played out. I have kept them laying to their full capacity, and they are weakening.

A great many bees have died off this year—more than I ever saw before. I don't know the cause, unless they have gotten honey from source that did not agree with them. Even in some of my strongest stocks working for box honey, as well as those with two tiers of frames, the young bees would crawl out and die, many of them with poor wings, and some perfect, and plenty of unsealed honey in the hives. They appear to be doing better now, but there are piles of dead bees, and there has been no robbing. I think as honey was very scarce they got something that sickened them, and they could not keep the brood covered. They would stand around, all in a tremble. They appear to be all right now, but I have had to reduce the hives by means of division boards.

I learn that some bee-keepers have gotten no surplus, but are feeding instead. I shall have about 2,500 lbs. of surplus, of good quality, about 300 lbs. of it comb in good shape. What unfinished sections I have I cut out and put in glass covered jars, and fill up with extracted honey. The whole goes at good prices. Many of my sections were on last season and are stained. I don't approve of the practice. J. D. ENAS.

Napa, Cal., July 15, 1882.

The Instructor.—Honey Labels.

Not having received the INSTRUCTOR for June and July, I am forcibly reminded that I have not sent along my subscription. Therefore I enclose the amount for the same, with my best wishes for your excellent little journal.

THOMAS BALCOMB.

P. S. I enclose you herein two or three of our labels for honey. What do you think of them for a little town in Texas? T. B.

Luling, Texas, July 17, 1882.

They do very well, indeed, friend B. You are working in the right direction to create and maintain a demand for your product. By only putting up a good article

in neat packages, and labeling each one, your "brand" will soon be known and established, and a regular demand created therefor.

Basswood with Friend Heddon.

The basswood honey flow is over here. It lasted 13 days. The yield was better than during the last two years, but by no means a full crop. 275 colonies overstocked it.

JAMES HEDDON.

Dowagiac, Mich., July 31, 1882.

Good Season.

I have never been kept so busy in my life. I have already harvested over 1000 lbs of honey. The season has been an excellent one here.

WM. BALLANTINE.

Sago, Ohio, July 25, 1882.

A Queer Freak.

Among the queer freaks of the bees, I now have a fine large queen about two months old, whose eggs do not hatch, except perhaps about one in two or three thousand. She has faithfully filled the hive, but this is the result. Can you give any explanation for such a freak?

The few cells which hatched are capped as worker brood.

L. S. JONES.

Sonora, Ohio, July, 1882.

Just why the majority of the eggs laid by the queen you refer to do not hatch, friend J., we suppose cannot be positively ascertained except by dissecting the queen and subjecting her to a microscopic examination. Probably it is owing to some natural defect. Such cases are very rare, though we have heard of one or two previous to the one you mention. If any of our readers have ever made a microscopic examination of such a queen, we would be glad to hear from them on the subject.

Southern Ohio.

The poorest season we have ever experienced in this part of the country is, perhaps, the present one. I fed about 200 pounds of honey to my bees in May, to keep them from starvation, and may now be glad if they find stores enough for a winter supply. So far they have not got it.

CHAS. F. MUTH.

Cincinnati, Ohio, July 22, 1882.

Question Box.

CONDUCTED BY..... F. L. WRIGHT,
PLAINFIELD, MICHIGAN.

All communications for this department should be sent to the above address not later than the 20th of each month, to insure an answer in the INSTRUCTOR the following month.

How to Begin Bee-Keeping.

I am looking for information upon the subject of bees, and noticing your articles in "Our Home" I take the liberty to write you for that information. I am somewhat interested in Horticulture, but I want particularly to be put in the way of getting the best practical information upon American bee-keeping. I have had considerable experience (some years ago) with the old-fashioned and Langstroth hive, but want now to know something about the new methods of bee breeding, etc. If you have any information as to how I may get the desired knowledge please write and advise me at my expense.

JOHN SHALLCROSS.

Attorney-at-Law,

4610 Frankford Ave. Philadelphia, Pa.

We are always happy to answer all such enquiries, especially if we may be the means of turning a lawyer from the error of his ways, or rather showing him his error and leading him from the crooked and perverse ways of law into the peaceful, health-giving and money-making path of the apiarist.

In the first place, you should have the best and latest books on the subject, such as "Cook's Manual," A. J. Cook, Lansing, Mich.; "King's Text Book," A. J. King, New York City; "New Bee-Keeping," L. C. Root, Mohawk, N. Y.; "A B C of Bee-Culture," A. I. Root, Medina, O., etc., etc. You should also subscribe for several of the best bee journals, a list of which we forward by mail.

It would be well also to attend some convention and to visit and talk with some of the best informed and most successful bee-keepers in your vicinity, and at such visits keep your eyes and ears open. In this way you may become tolerably proficient in the art, but nothing can teach you as much as *actual work in the apiary*. When we began bee-keeping ten years ago, we had read almost everything published in this country, but as soon as we began to work with our bees we began to learn as we never did before. If you have no bees procure a stock or two in a good movable frame hive, and at once begin to study them. Pull them apart every day, or a score of times a day if you please. Watch the development from the egg to the larva, and from the larva to the perfect bee. Note the rapidity with which the queen deposits her eggs, and calculate how much the colony would lose were she absent for but a sin-

gle day. Observe all these things and many, many others, and you will soon become so interested you will find the day too short to allow you to learn all there is to be learned from the busy bee.

We give your name and address in full, and hope some of the exchanges of the INSTRUCTOR will favor you with specimen copies of their publications.

Editor's Corner.

The Rearing of Queens.

The following editorial from the *Bee-Keepers' Guide* deserves consideration for the suggestions it offers in queen breeding. We generally select the largest and what seems to be the best developed queens to breed from, but are we certain that such are really the best? May there not be an abnormal growth in some queens that would render them, when *very* large, less desirable than queens of medium size? The matter is certainly worthy of careful thought and consideration:

What shall be the standard physical characteristics of the coming bee?

That advancement may be made toward producing *Apis Americana*, it is important that an impression of its physical characteristics be given and that this impression or representation of the coming bee should be the effects of causes and conditions that will produce those qualities which are to bring forth the best honey gatherers and hardiest race. Breeders of bees in the same manner as poultry and stock breeders should have a standard of excellence and make an effort in the line indicated. While it is true that we select queens that are yellow nearly their entire length for breeding purposes, and charge the highest price for them, we have come to believe from experience that such queens are not always the best. For reasons we will presently give we are inclined to favor the queen that resembles a fine worker bee. She should have three distinct yellow bands and the remainder of the abdomen should be proportionately like a worker. Yellow queens are produced during very warm weather in strong colonies, and we regard the conditions as not being favorable to produce energetic, hardy and long-lived queens. Because of the fact that much heat is necessary to produce the

yellow queen we believe the color to indicate weakness. When colonies increase naturally, at the capping of the first queen cell the bees swarm and leave the old stock quite weak for the following eight days, while the young queens are maturing, and the queens produced in this manner show more black or dark rings than they would, had only the queen been removed and all the bees allowed to continue the high temperature while the queens were being developed. We find that a large number of queens perish before they become fertile during extremely warm weather, and we believe heat to be the cause.

Some of the largest and finest yellow queens are short lived, and especially the very large ones. A certain amount of heat is required to produce vigorous animals and plants; a little more heat may promote a more rapid growth, but produce weaker animals and vegetation. We believe that extreme heat should be avoided as much as a temperature so cool as to produce dark and inferior queens. We mean that while the queen breeder keeps his breeding stocks strong and comfortable during the early spring, he should be equally careful to keep them cool and comfortable during the heat of summer, by reducing their strength and supplying shade. In other words, we advise a mean temperature for breeding stocks in order to secure queens that are uniform in color, can resist cold, endure heat, and to insure longevity.

Bees in this portion of Kentucky have done little more so far than sustain themselves, except in a few favored localities. Owing to the fact that we moved our bees from Ohio late last fall they came out weak in the spring and very scant of stores. We have, however, taken some surplus honey, principally from the poplar bloom, and have nearly doubled our colonies, most of which are now in good condition. Some of our best colonies are increasing their stores slightly, while other hives are growing lighter. All, however, are gathering sufficient to keep up breeding. Should we have a favorable fall we expect to be able to give a good report of the yield from fall flowers, as many portions of Kentucky are noted for their great profusion of honey-producing bloom during the months of September and October.

Robbers.—We have a short communication from friend De Freest, of East Greenbush, N. Y., in which he gives some experience in his apiary with robbers. The robbers having commenced on a weak colony, he was unable, after covering the hive with a sheet, to drive them away with smoke, but succeeded fully with water thrown from a Whitman pump with a sprinkler attached. This friend De Freest tells us caused the robbers to beat such a hasty retreat that in ten minutes time the work was complete. We have frequently found water much more effective than smoke in quelling a disturbance about a colony. We speak of this matter for the benefit of the novice. Friend D. further says:

"It being near night I scented the hive with peppermint, and the bees the next morning were able to recognize intruders, and defend themselves.

"Honey has been coming in every day and hour since the 7th of this month—July. The honey flow has been so great that the queens are crowded, although the bees have been storing honey in sections all the time."

Late Publications.—The August number of *The Century Magazine* is "chuck full" of good things, and is one of the best numbers of that magazine we ever had the pleasure of reading. The same may be said of *St. Nicholas*, its counterpart for the young folks, though for that matter we opine the older folks are almost as much interested in *St. Nicholas* as the children.

"Theatrical and Circus Life" is the name of a new book just issued by that enterprising firm, the Sun Publishing Co., of St. Louis. This interesting work will be welcomed by the thousands who nightly visit our places of amusement, but who are unacquainted with the mysteries of the "profession," and will be doubly welcomed by those who never visit such places, but whose curiosity has often been excited by the flaming posters placed in many conspicuous places. It is a grand book for agents. We call attention to advertisement elsewhere.

Queen-Breeders.—One of our correspondents writes to us complaining about not receiving queens in due season after having written for them, and wants to know "what kind of men queen-breeders are anyway." Well, we suppose they are much like other men, and as a class compare favorably with men in other callings in life. We confess, however, that we have been somewhat tried with one or two of this class of men. We were to have had some queens last year for advertising, but they have not come to hand yet. As a class we have been treated very fairly and honestly by these men, and whenever one of them does not come up squarely to the mark, we make all due allowance for such, because we know the uncertainties with which the business is surrounded. As to this season we must recollect that it has been very unfavorable, especially in the northern and middle latitudes of the United States, where wet, cold weather continued much later than usual.

We occasionally get a communication in which there are a few good points, but which is so worded that we are unable to clearly get hold of all the writer's ideas, and hence have on one or two occasions been complained of for not giving the writer's views just as he thought he had expressed them. Be clear and explicit in what you say. This can frequently be done best by cutting a long story short. If you think your experience is such as to teach an important lesson, if only to the novice, give it in as few words as possible, to make it plain to those for whose benefit you write. Read over your communication carefully after you have completed it, and see if you have given your ideas so clearly that others cannot possibly mistake your meaning. Do this, and we shall endeavor to do our part faithfully for the benefit of the patrons of the INSTRUCTOR.

One, two, and three-cent stamps accepted as cash on subscriptions.

Those contemplating the construction or stocking of fish ponds will do well to correspond with Muth & Eckardt, Mt. Healthy, Ohio, whose advertisement will be found elsewhere. They have over twenty ponds, stocked with numerous varieties of fish, and will sell them in lots to suit purchasers.

When you find a cross opposite your name on the wrapper, it is a reminder that your subscription has expired. If the INSTRUCTOR is desired continued a prompt renewal is necessary.

Just what our St. Louis market reporters mean by beeswax being in demand for "feeding purposes" we are at a loss to know. Perhaps they will be kind enough to inform us.

Honey and Beeswax Markets.

REPORTED FOR THE INSTRUCTOR.

Boston, August 7.
Honey—Best new is in good demand here at full prices. We quote: 1 lb. section, 25c.; 2 lb. section, 22c.

Beeswax—Best, 30c.; common, 25c.
CROCKER & BLAKE.

Baltimore, August 5.
Honey—On account of warm weather honey is no sale. We quote nominally: Comb, 10 to 12c.; extracted, 8 to 10c.
Beeswax—22 to 25c.
C. H. LAKE.

Cincinnati, August 5.
Honey—No arrivals yet of comb and prices nominal. The demand for honey in glass jars is fair, and good for honey in barrels for manufacturing purposes. It brings 7 to 10c. on arrival.
Beeswax—20 to 25c. on arrival. C. F. MUTH.

Chicago, August 7.
Honey—The crop of 1881 in comb is out of market, offerings having been all taken. The new crop is beginning to move at 18 to 20c. per pound for white comb in small sections. Extracted, 8 to 9c.
R. A. BURNETT.

New York, August 7.
Honey—We quote 1882 crop comb as follows: Best white in 1 lb. sections, 20 to 22c.; best white in 2 lb. sections, 18 to 20c.; fair white in 1 lb. sections, 16 to 18c.; fair white in 2 lb. sections, 15 to 17c.; mixed and dark in 1 and 2 lb. sections, 12 to 14c. Best white extracted, 10 to 11c.; buckwheat, extracted, 7 to 8c.
Beeswax—Prime quality, 27 to 28c.
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Cleveland, August 5.
Honey—Is slow coming in. All that has been received so far has sold for 25c. per lb. in 1 lb. sections; no 2 lb. as yet received. A few cans of ex-

tracted has been received, but none sold yet, so we can not quote it.
Beeswax—25 to 28c.
A. C. KENDEL.

St. Louis, August 5.
Honey—Moves slowly at from 7½ to 8c. per lb. for extracted, recent warm weather having retarded sales somewhat.

Beeswax—Increased enquiry for feeding purposes has caused stiffer prices. Fair to prime, 28c. per lb.
R. C. GREER & Co.

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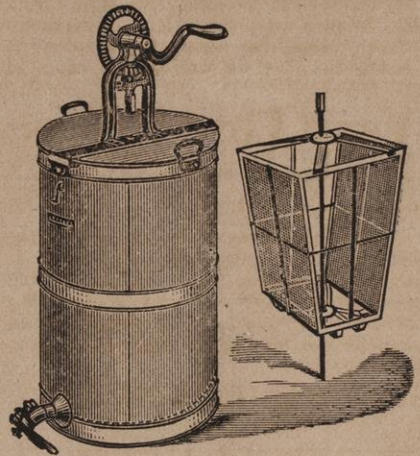
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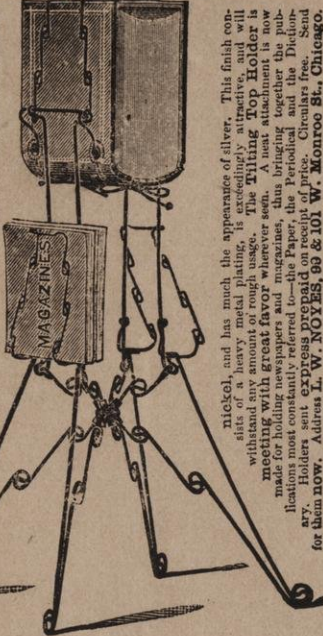
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