



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The bee-keepers' instructor. Vol. III, No. 8 August, 1881

Adelphi, Ohio: Webster Thomas & Sons, August, 1881

<https://digital.library.wisc.edu/1711.dl/ITTLN65BORRPV8W>

<http://rightsstatements.org/vocab/NKC/1.0/>

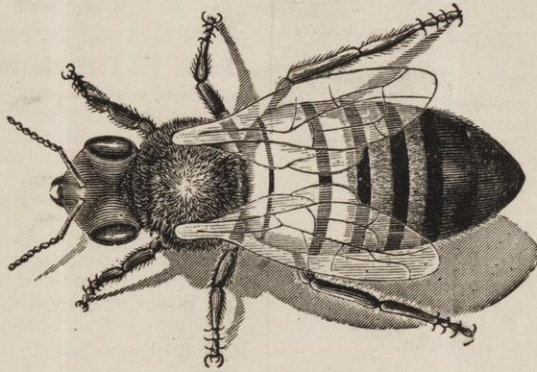
For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

THE
BEE-KEEPERS'
 INSTRUCTOR.



Webster Thomas, Editor.

CONTENTS.

Review No. 4.....	497	Are We Really Prospering as Api-	
Building Up.....	498	arists?.....	505
The Honey Yield in California.....	499	Mrs. Lucinda Harrison on Grape	
Criticisms on the Critic.....	501	Sugar.....	506
How to Render Wax.....	501	A Colony Determined to Keep	
The Honey Flow.-New Swarms.-		Two Queens.....	507
In-and-In Breeding, etc.....	502	Question Box.....	508
Duplicating Queens.-Humbug-		Editor's Corner.....	509
gery.-The Honey Season.....	504	Honey and Beeswax Markets, etc...	512

ADVERTISING RATES.

Advertisements of less than 1 inch, 10 cents per line, each insertion. 1 to 3 inches, per inch, each insertion, 75 cents. 9 lines of minimum, our advertising type, containing about 8 words per line, make one inch. Discounts will be made as follows:

On 1 to 3 inches, 3 insertions, 5 per cent; 6 insertions, 10 per cent; 9 insertions, 15 per cent; 12 insertions, 20 per cent.

Special rates given on advertisements of 1/4 page or over. Send for estimate.

Advertisements changed quarterly, if desired, and all advertisers will receive the INSTRUCTOR free, provided their advertisements amount to at least five times the amount their subscription would be while their advertisements are running.

If our readers in answering advertisements will mention where they saw them, they will oblige both advertisers and us.

W. THOMAS & SON.

Queen Breeders' Directory.

Cards of 5 lines or less will be inserted under this head during the remainder of the year for 35c. per line. Over 5 lines, 30c. per line.

G. J. PAMMEL, La Crosse, Wis., sells Italian queens, comb foundation, Langstroth and Gem hives and Apianian supplies.

S. D. McLEAN & SON, Culleoka, Tenn. Colonies, Nuclei & Queens. Send for circular.

J. T. WILSON, Mortonsville, Kentucky. Warranted Queens one dollar.

REV. W. BALLANTINE, Sago, Musk. Co. O. Ital. & H. Land Queens. Send for circular.

PAUL L. VIALON, Bayou Goula, La., breeder and shipper of fine Italian Queens and Bees. Send for 16-page circular.

H. H. BROWN, Light Street, Col. Co., Pa., breeder of Italian & Cyprian queens, etc.

Clubbing List.

The BEE-KEEPERS' INSTRUCTOR and any of the following bee journals, will be sent to one address, one year, at rates given in right hand column below. The figures on the left give the regular subscription price of each:

BEE-KEEPERS' INSTRUCTOR.....	50c	
With American Bee Journal.....	\$2 00	\$2 20
" Bee-Keepers' Magazine.....	1 00	1 25
" Gleanings in Bee-Culture.....	1 00	1 30
" Bee-Keepers' Exchange.....	75	1 10
" All the above Bee Journals.....		4 20
" The Bee-Keepers' Guide.....	50	80
" The Kansas Bee-Keeper.....	30	70

Italian & Albino QUEENS! Sept. & Oct. Prices:

Untested Italian queens, sure to please you, 75 cents each; per half dozen, \$3.50. Albino queens, \$1.00 each; per half dozen, \$5.00. If you wish to have the best natured bees under the sun, get the Albinos.

Send in your orders at once to avoid the rush.

J. M. C. TAYLOR,

Lewistown, Fred. Co., Md

6

FREE!

We wish to obtain 25,000 New Subscribers to **THE FLORAL MONTHLY**

During the next few months, and we propose to give every reader of this paper

FIFTY CENTS WORTH OF CHOICE FLOWER SEED.

Our offer is to send Free of Cost, 50 cents worth of Choice Flower Seeds to each and every one who will send us 25 two cent postage stamps for the Floral Monthly one year. Seeds sent Free by return mail. Specimen copies free. Address

W. E. MORTON & Co., Florists,

616 Congress Street, Portland, Me.

(Natural Flowers preserved to last for years.)

Greatest Bargain EVER OFFERED!

Having more bees than I can properly take care of, I will sell an apiary of 100 colonies

At the low Price of \$4.50 each.

They are in good movable-frame and well painted hives, with straight, all-worker combs, and have plenty of white honey in the hives to winter on. The bees are

Italians and High Grade Hybrids,

And have been improved for years, and now there are no better bees for BUSINESS in this country. I know what I am talking about, and after a trial you will say the same as I. **YOU WILL BLESS THE DAY YOU SAW THIS.** These bees will be ready for shipment after Sept. 20.

GEO. W. HOUSE,

Fayetteville, Onondaga C.o, N. Y.

Bee-Keepers' Instructor.

VOL. III.

ADELPHI, OHIO, AUGUST, 1881.

Ann. Co No. 8.

Published the mid-
dle of each month.W. THOMAS & SON,
Publishers and Proprietors.Terms, 50c. per year,
or 30c. for 6 months.

Our Contributors.

For the INSTRUCTOR.]

Review No. 4.

GEORGE W. HOUSE.

The July No. INSTRUCTOR received on time. I notice "Our Critic" is having a pretty good shaking up. Well, *that's right*. With the aid of friendly discussions and criticisms we shall the sooner be able to reach "rock bottom."

But I fear "Review No. 4" will be unsatisfactory, as we are in the midst of the basswood bloom, with 200 colonies of bees, and about 11,000 pounds of surplus comb honey to look after.

I should be pleased to more thoroughly discuss the question of "bad food" or "the juices of decayed fruits," but time and space will not permit at present. I have given my opinion, based on experience, and am willing to let the future decide the question, and give credit for what it may prove to be worth.

I think Friend Moon misunderstands me in regard to those "various causes," etc. I claim that it is various causes that produced the great mortality the past winter. Again, a continued cold, damp atmosphere causes confinement, and such confinement produces dysentery every time, and in proportion to the various conditions of the different hives. In mild winters with frequent flights dysentery is unknown. I wish to give a few facts that we may ponder upon, when we will let the matter rest for the present.

Why did not dysentery exist previous to 1871? Again, we have one apiary of 150 colonies that has not stored a pound of dark or fall honey in three years. This apiary has wintered the past three winters with a loss of less than 5 per cent. There is an abundance of fruit within easy reach of the bees. Now, friend M.,

would not the bees in this apiary under the conditions and circumstances gather as much of the juices of decayed fruits as any body else's bees? If so, why do we not suffer from dysentery and larger losses?

Friend Thomas, your questions are too complex. At present I will answer them with both *yes* and *no*, and hold the subject open for future discussion.

I will refer to the article of Mr. Mitchell on page 485 as briefly as is consistent with my position. I have not intended to do injustice to any one, and *now* fail to see wherein Mr. J. has been unjustly dealt with. Mr. M., you say "Mr. J. is one of the best informed apiarists in the country." True, Friend M., you make an assertion you certainly can not substantiate. Please ask yourself this question, *how do you know*, and then read the sixth paragraph on first page of the July INSTRUCTOR, and consider.

Friend Thomas, in your comments on page 489 you say: "Have no weak colonies if it can be avoided, unless it is necessary to save a valuable queen." Here you strike an important factor in successful apiculture. But, Friend T., our experience proves to us that *uniting* weak colonies is not as practicable or desirable as *building up* the weak ones, by drawing a frame of hatching brood from the strongest colonies and inserting a frame of empty comb in its place. No apiarist can estimate the advantages thus derived until he has made a trial. Once practiced it will never be abandoned. I consider it the "key note" to a successful season's operations.

On same page Friend Egan says: "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." Now I think I hear somebody shouting—STEADY THERE! But I can not help saying that I consider this bad advice to the inexperienced. With Friend E.'s mode we must winter our bees on newly built combs, when it is an admitted *fact* that bees winter far better, and with a much less per cent. of loss, on old combs than on new ones. A better way would be to raise the outside frames in lower story to center of upper story, spread the frames in brood chamber and fill vacancies by inserting frames of empty comb or foundation. We thus avoid the building of drone comb in brood chamber. Try it and see for yourself.

Page 492 Mr. Volkenand says: "Aug. 22d found that all apparently gathered honey enough to last them over winter, but I suppose they gathered it from peaches, grapes and other fruit, of which we have plenty in the neighborhood." Here we have a fair illustration of some of the suppositions and fancied ideas in regard to the "juices of fruits." Friend V., can bees *gather honey* from the juices of fruits?

On the same page Mr. Lewis in his letter says: "Think very cold weather and uncapped, thin, new honey, the causes of my loss, in connection with too much pollen, which gave my bees the dysentery." I think Friend L. strikes the right cord, which if properly tested and experimented with will, in my opinion, settle the "cider mill" question beyond the possibility of a doubt. The two above extracts are beautiful examples of the conflicting ideas regarding bad food for wintering.

Let us all "make haste slowly" in coming to conclusions, and contributing new ideas. Let practical experience prove our theories to be *undoubted truths*, before giving them to the public. Possibly the above may be a good lesson for me to keep in mind, and if I get off the track do not be backward in pouring red hot "shot and shell" into camp.

Fayetteville, N. Y., July 23, 1881.

For the INSTRUCTOR.]

Building Up.

J. H. MARTIN.

After every great disaster to a community from the effects of storms, floods or fires, how busily do the afflicted but not disheartened survivors go to work and

rebuild and beautify their habitations. It seems that redoubled efforts are put forth to build up the waste places.

So with the bee-keeping fraternity after the disasters of the past winter, during which there was a sad tearing down of years of hope for prosperous days in the near future. And now the building-up process is being skillfully managed (not always "skillfully managed," we are afraid, Friend Martin.—ED.) all over the country.

We did not lose so many of our bees as to cause us to wish to build up very rapidly, but we shall increase our 80 colonies to about 130, and be content. Our mode of management in the spring was as follows:

By the middle of May we had 25 colonies that were very strong, and 55 that ranged from medium to very weak. We were *sure* the 25 colonies were very strong with young bees, and every frame was full of brood. We were then ready to equalize the colonies. A frame of hatching brood was drawn from each of the strong colonies as often as they would bear it, and inserted in those that were in need of aid. Some needed but one frame to make them strong, while others needed as high as four. We thus continued to equalize until all of the 80 were rousing colonies. We found it safe to draw a frame of brood from each strong colony once a week, and insert in its place a clean, empty comb. It is a good plan to draw a frame that has hatched a portion of the brood from the comb, as so much of the vitality of the colony is not taken away, while the weak colony is helped amazingly by the remaining brood that is hatching.

After all your colonies are strong, with good prolific queens ready to occupy every empty comb you insert, you are ready to make artificial swarms. We are supposing that you have plenty of empty combs in your bee house to draw upon when you want them.

When we got our 80 colonies all strong then the surplus stories went on for extracting, every one full of clean, bright combs. In a few days work was commenced in these, and then we formed a number of nucleus swarms for queen rearing. Just as soon as our queens were fertile we commenced forming artificial swarms, and extracting at the same time. The first time we go over our colonies with the extractor, we find considerable brood in the upper story. We place thi

down in the brood apartment, and draw therefrom two or three frames of hatching brood and place in a new hive. We place five frames of hatching brood and adhering bees in each hive we form a colony in, and fill up the rest of the hive with empty combs. In 24 hours all of the old bees return to the parent hive, and the young, fertile queen is inserted from the nucleus. She will soon fill all the empty cells with eggs, when we spread the brood and insert empty combs, and we soon have a strong colony, with plenty of honey upon which to winter. This process can be carried on more rapidly if no honey is desired, but slow and sure is a safe rule for the bee-keeper, and we find this plan does not interfere with a good yield of honey from the parent colonies, and usually prevents all natural swarming. It is safe to thus form colonies as long as you have empty combs and the queens will fill them with eggs, and the bees store the necessary amount of honey.

In taking brood with adhering bees, the novice should be extremely careful to be sure that the old queen is not taken from the parent hive. If a quantity of bees are on the comb, you can place a corner of the frame upon the alighting board of the new hive, and run them right in. You will then see the queen if your eyes are kept strictly to business.

Nearly every bee-keeper has his own way of artificial swarming. Our way pleases us best, for by it we secure both increase and surplus.

Hartford, N. Y., July, 1881.

The Honey Yield in California.

In our last issue we stated that we were trying to obtain information concerning the honey yield of California, and if successful would present it to our readers this month. Quite a number of reports have been received by us since then, covering the most important honey-producing portions of California, and according to promise we give them herewith for the benefit of our readers. Or rather we give a portion of them only, as several were from localities where the bee-keeping industry amounts to but little, and still others were from portions of the State the reports

given cover, and so we omitted them, as they would only take up space and afford no additional information.

As will be seen by referring to the reports, the most liberal estimate places the crop at one-fourth of the average, while taking the average of the reports it falls far below that. Every report received (including those not published), without a single exception, speaks discouragingly of the crop, and many bee-keepers will consider themselves fortunate if their bees gather honey enough to carry them over to another year. With the large losses of bees the past winter, which cut down the producing force unusually low, no crop to speak of in California, so that eastern bee-keepers will not have to compete with "floods" of honey from that source, and no more than an average crop over the rest of the country, bee-keepers will certainly get an extra price for their product this year, if it is not all rushed into market at once, thereby glutting it.

But we started to tell about the California honey crop, and will have to return to the reports, which are as follows:

SANTA ANA, Cal., July 11.

The honey season is almost an entire failure in Southern California. There has been but very little increase; in many cases none at all. In many places bees have given no surplus whatever. My increase is 50 per cent., and I have extracted 3,000 pounds of honey. The bees are in splendid condition. My increase is far ahead of any apiary I have heard of in Southern California, and I am well posted in Ventura and Los Angeles counties. There is a considerable amount of old honey, held over from last year, still in the hands of bee-keepers.

ELISHA GALLUP.

SAN FERNANDA, Cal., July 5.

I commenced with 140 stands of bees in the spring; have made no increase but have taken 2,300 pounds of honey. Shall extract again in a few days, which

will be the last to take out this season. I shall get a few hundred pounds more, but the whole amount will probably fall short of 3,000 pounds. The honey season is so nearly over now that there will be nothing worth mentioning gathered after the present time. I have made inquiries in all directions as to what the bees are doing, and so far as I can learn, in a region 50 miles on the west of me and nearly the same distance on the east—in fact, the whole of Los Angeles county, with the exception of a small area on its eastern border—I have not found *one* who has done as well as I have. Many have not taken any honey this season, and fears are entertained by some of their bees starving. So far as I can learn, San Diego county is no better off than this. I suppose you are aware that Los Angeles and San Diego counties are the two great honey-producing counties of the State. So I think you eastern bee-keepers need have no fears in regard to competition in honey from California this season.

CHARLES BRIDGER.

SAN BERNARDINA, Cal., July 14.

The honey crop of San Bernardino county will be about forty tons—one-third of a crop. The season is about over. In Los Angeles and San Diego counties the bees have done little or nothing.

WM. G. BAILEY.

INDEPENDENCE, Cal., July 16.

I hear from different sources that the honey season in Southern California is a total failure. In this section, where alfalfa is the principal honey plant, bees are not doing as well as last year. Still they are gathering some honey, and I shall commence extracting next week. I can not tell anything about the honey yield yet. Extracted honey sells for 12½ cents per pound, exclusive of cans. Very limited market, freight (by team) being so high that it does not pay to export.

WM. MUTH-RASMUSSEN.

OSGOOD, Cal., July 15.

I live in the midst of some of our heaviest apiaries, and can say that this season for California is almost a total failure. But owing to some cause honey has not advanced any at our market, the city of San Diego, prices there ranging from 5 to 6 cents per pound for extracted, and from 10 to 11 cents for comb. One of our dealers says there will be one-half a crop, but the apiarists think it is old honey held over, for we positively have no

new honey for sale. San Diego county may not, and probably will not, produce more than 20 tons of honey. This section is very dry this year, and no one looks for anything more at all until another season, though some very favored localities may make a little. Further north honey is being made, but from reports only in limited quantities. I could not possibly think of more than one-fourth of a crop for this year. Why honey does not go up I can not see, but conjecture that honey merchants are waiting to make sure of their being no crop.

CHAS. S. SANDERSON.

SANTA PAULA, Cal., July 11.

Ventura county will produce about 50 tons of extracted honey against about 400 tons last year. I think this about a sample of Southern California. We produce but very little comb honey. Bees have increased perhaps 10 per cent., and will have ample stores for wintering.

R. TOUCHTON.

LOS ANGELES CITY, Cal., July 11.

The honey crop in Southern California is a failure, at least as far as surplus honey is concerned, although most of the bees, with proper care, will collect sufficient honey to carry them through to early pasturage in 1882. But if there is not abundant rain the coming winter, the loss will be heavy. There is not sufficient honey on hand to feed through to 1883, and bee-keepers here are such a careless set, they never will make feeding a success. There was about half a crop in 1880, of which about one-half is still on hand.

S. D. BARBER.

HALFMOON BAY, Cal., July 5.

The honey yield is over in this (San Mateo) county, or was about the 1st of July. From all of the southern part of the State, as far as heard from, comes the report that there will not be one-third of a crop. Cause, cold winds. The San Francisco honey market ranges from 11 to 13c. per lb. for comb, and 6 to 8c. per lb. for strained. Honey will be high.

CHAS. R. BALLOU.

SAN BUENAVENTURA, Cal., July 15.

My 400 colonies of bees this season gave me 35 swarms and two tons of honey, while at the rate they yielded last year, which was not an extra good season, I would have had forty-five tons of honey and 450 swarms of bees. I think my yield about as good as the average for all of California, as I have correspondence

from different parts of the State. Besides, the honey is not as good as the average California honey, as sage yielded so poorly that bees worked at the same time on bloom of an inferior quality. There is almost no honey selling, as holders will not sell at the prices offered. Last week I purchased 12½ tons of last year's crop, first quality, at 7c. per pound here at the apiary, which is as good as 7½c. in the city of San Francisco, the great market for California. I think we might say that city prices now run from 6 to 7½c., according to quality. Holders would let a large portion of their honey go if ½ to 1c. more per pound were offered, and I think they will eventually realize that much. R. WILKIN.

For the INSTRUCTOR.]

Criticisms on the Critic.

B. S. UNDERHILL.

In a former number of the INSTRUCTOR I referred to "diseases that sweep off whole apiaries," and attributed these diseases to too cold winters or too open hives, which caused bees to freeze to death. In the next issue Friend House admonished me to be more careful in what I said, as such statements were too misleading to the novice. I now wish to say a few words about his so silently passing over Mr. Doolittle's article in the April number entitled "Do Bees Freeze to Death?" From Mr. D's remarks it would seem that there is no use in protecting our bees, and that they can be wintered without protection in any hive or in any locality. Now I have read no statement in the INSTRUCTOR that is more misleading to the novice than this very one, and yet Friend House is silent. Is he afraid of the veterans?

Does every stock that dies pass off with the dysentery? Had Friend D. told us just how long those bees could have survived that cold spell, would he not have added much more knowledge to the science of bee-keeping? Anyone who has handled bees knows that too cold weather makes them perfectly stiff and apparently lifeless, and because a three-days' freezing failed to kill them, Mr. D. concludes that it is impossible to freeze bees. From his article, therefore, may be deduced this axiom: If bees freeze to death they must do so inside of three days. Yet this is certainly not the case.

Some animals die immediately where others live for hours. Behead a sheep, a hog or a calf, and how long will it survive? Not a minute. And yet you may pull the head from off a bee, and life will remain for a considerable time, while the insect known as the horse fly will live for hours without its head.

On page 473 we find our critic quoting the language of Mr. Doolittle, from the 17th to the 25th lines, inclusive. This, we think, is a direct acknowledgment that bees do freeze, and that the length of time required depends wholly upon the number of bees in the cluster. One bee will freeze sooner than 1,000, because there is not so much heat to vaporize, and the same reasoning will hold good for a colony of 50,000. Facts are stubborn things, and it is folly to attempt the defence of a position we can not support by proof. Bees in ordinary hives may drift under the snow with safety, if the weather is continually cold, but it is sure death to them when in air-tight hives. Pack your bees in chaff hives, place them up to clear the snow drifts, and if fair colonies they will survive at least one week of zero weather. But if in any other than thoroughly packed chaff hives, take them to warmer quarters if the cold lasts longer than seven or eight days.

The season with us is very good, although swarming is rather backward on account of cool weather. I have taken 80 pounds of honey from one hive of native bees.

I wish I could see and tell every victim of Mrs. Lizzie Cotton's moth-proof hive, that after seven years' experience with moth proof hives the only one I have been able to find is a plain hive, devoid of traps, containing a strong colony of Italian bees.

With friendship toward all of our deserving fraternity, I will close.

Williamson, N. Y., July 11, 1881.

For the INSTRUCTOR.]

How to Render Wax.

JAMES HEDDON.

In making comb foundation this season I have found a vast difference in the quality of different lots of wax, some being much better calculated to make a No. 1 article of foundation than others. I wish, in as few words as possible, to give

a few hints in regard to the extracting of wax from combs, for no doubt all will agree with me that the main difference in different lots of wax, as we buy them, is due to the manipulation in rendering, rather than to any difference in the nature of the wax composing the combs used:

I first sort over my combs, putting them in two classes—light and dark—and when so doing I cull out and throw away pieces excessively full of bee bread, or containing dead bees or brood. By so doing I have a cleaner, better and brighter wax, and I think nearly or quite as much as when all the comb is used, as all the wax there is in the comb that is excessively filled with foreign matter will be absorbed by that matter. By any known process there will always be left small particles of wax all through the residue, and the amount of wax thus left will always be in proportion to the amount of residue; therefore, but little is lost by casting away this filth before boiling up the mass. The first-class comb is rendered by itself, and used for foundation for surplus, while the other, or dark wax, is made up for the brood chamber.

One important fact to be borne in mind, is that excessive boiling of wax will not only color it darker and darker, but boil all the tenacity of fibre out of it, leaving it a crumbly, rotten mass. So don't expose it to heat any longer than is really necessary.

There are various ways of rendering wax, among the most cleanly and popular being with the wax extractor, working with steam. I bought nearly a dozen this spring, and having used one a little in a small way the previous year, felt sure of their practicality. Very lately I got at my odds and ends of combs (and I had a lot of them, as I had culled out all second class and drone combs, above what was used to hold some fifteen choice queens to rear drones from), and hauling out the extractor commenced operations. Now that I had some considerable amount of comb, and that my time was very valuable to me, I discovered that while the extractor was, to my satisfaction, everything that could be asked of it in every other way, *it was too slow*, for a practical machine, in large apiaries. I returned to the old sack, rolling pin and tub of water with much satisfaction, and determined to use and sell the extractors no more. I think I can get up an apparatus much better than either, for those who wish to

do business on a more extensive scale, and hope to make one for my own use and satisfaction by and by.

THE HONEY SEASON,

That is, the early season for the crop of white honey, is over here now, and I have secured about one-third the usual amount. I think there has been about one-half of the average crop, however, but as I had a large number of choice combs to cover, I did not try to discourage swarming, and so a little more than doubled my number of colonies. All are now strong and in fine condition for the fall harvest, whatever that may prove to be. I have but little faith in it, however, as we have just passed through a long and severe drouth, which ended with copious rain during the last 30 hours.

I am of the opinion that, owing to the fact that bees are much scarcer than usual, and that the honey crop is hardly average throughout the country generally, that honey is going to sell at round figures, and be in lively demand. If bee-keepers do not rush in their crops too soon, and all at once, they may realize better figures than for some years past. Reports from different sections throughout the United States, sent to our journals, will post us as regards what supply and demand may be expected. I hope bee-keepers will not be slack in sending them in.

Dowagiac, Mich., July 21, 1881.

For the INSTRUCTOR.]

The Honey Flow.—New Swarms.— In-and-In Breeding, etc.

J. KLINGER.

For a long time I have held my peace, so that I have almost lost my interest in bee-keeping, but since the white clover has bloomed the bees here have done so well that my enthusiasm is nearly revived again. I got through the winter with four stands, one of which I feared I should lose with dysentery. But when the clover blossomed and the bees got a better diet, they soon revived. The old hives are full of honey, and eight newly-made colonies are nearly all full also. If the white clover yield keeps up a little longer I fear there will be more swarming, and I can not well prevent it, as my extractor is broken, and I have hardly time to get it mended. My neighbors are having a similar experience of swarm-

ing and honey gathering. I divided some, but being so busy with my green-house and garden I have not given the bees their share of attention. Only when called that the bees were swarming I run out and hive them and return again, but my wife kept a lookout for honey, and as soon as she saw the loads of honey in the hives she began to clamor to use the extractor, and I did extract a little, and as soon as I can get my extractor in order I shall commence extracting again. But just here I want to say that when my bees swarm and I hive them I invariably give the new swarm a sheet of brood, if not from the hive they came out of then from any one most convenient to get at. I do this to keep them from going to the woods.

I divided an American hive, but as the frames of the American do not fit in the Mitchell hive I simply took a frame of brood with a queen cell started on it from another hive, and put it into the hive for the new swarm. I then removed the American and put the new hive in its place, but I found they did not do half as well as when I put the old queen into the new hive. When I divide I usually take the frame the queen is on, and with the adhering bees put it into the new hive, and I find this season while we have plenty of empty combs to put in, it works well. But were I to divide late in the season I would take a frame or two from such hives as could spare them, with the adhering bees, and fill the hive up in this way, so as to have a full hive and plenty of bees to take care of the brood. But to do this I want a fertile queen to put in right away while all is confusion in the hive. Having put bees from several hives together in the new hive none of the bees feel like fighting. They are all strangers to each other and have nothing to fight for, and so by and by they settle down quietly and accept the queen you put in as the proper mother of the colony, although she is but a stepmother to most of them. But to wait until they have begun queen cells the bees are not so willing to accept a step-mother, and will kill her if she is not confined in an introducing cage.

I notice an article in the March No. of the INSTRUCTOR from J. H. Martin, on the subject of "In-and-in Breeding," that strikes me as being pretty near right, but he (as brother Henry says) leaves a gap that I wish to close up. I have long been convinced that if we let the bees

alone they will prevent in-and-in breeding by their annual migrations in swarming time. But of late years we generally do the swarming, hence a colony seldom goes to the woods. But even under the new order of things they seem to do all they can for the diffusion and mingling of blood, as we know from the great difficulty we have in breeding pure Italians where there is any possible chance for them to mix with other races. I raised some very fine looking queens last spring, one being from a colony that cast a swarm the 21 day of May. The old hive had plenty of fine drones, and as it was so early in the season I expected to get a purely-mated queen, but her bees are hybrids, and the blackest I have in my little apiary.

An effort was made some years ago by Mr. Root to raise pure Italian queens by keeping his queenery on Kelley's Island, in Lake Erie, but it did not succeed, and was abandoned. C. Mitchell also tried the experiment on Johnson's Island, but the experiment did not work well, and he abandoned the Island and returned to Hoosierdom again. If we wish to prevent in-and-in breeding we must fertilize in confinement. So far, however, experiments in this direction have practically proved to be failures, and even should we succeed in this, we must take measures to introduce new blood at intervals by bringing bees from elsewhere. But should fertilization in confinement entirely fail we must then import queens at intervals, so as to keep up a sufficiency of pure blood to have the advantage of a profitable cross. Mr. H. A. King imported pure Italian queens here some years ago, but the new blood has been so *diluted* that it is now hardly discernable. I purchased the finest American-bred bees I could get, and now the bees I left here six years ago scarcely show a single mark of the cross with the Italians. So that Mr. Martin is right that in-and-in breeding is next to impossible except by fertilization in confinement. And he is right, too, that after we do all we can to infuse new blood into our bees, they may be destroyed by dysentery, or any of the ordinary or extraordinary ailments that at times befall them.

As I have told you in a former article my bees wintered badly. They were on their summer stands, and being moved late in the fall, badly managed and not protected, they had a bad show for wintering. I lost twelve colonies out of sev-

enteen. Mr. L. Clark, near by, has blacks, and wintered them successfully on their summer stands without any protection. So I still believe that the best way to winter bees is on their summer stands. Housing would no doubt be good, if we could always hit upon the right time to remove them from the house or cellar to their summer stands.

Upper Sandusky, O., July 20, 1881.

For the INSTRUCTOR.]

Duplicating Queens.—Humbuggery.—The Honey Season.

A. F. MOON.

The INSTRUCTOR for July came to hand in good time, containing, as usual, much to interest both the practical bee-keeper as well as the novice. While it is a fact that a large proportion of what appears in the bee journals is written by those who have been engaged in the business but a few years, and while the views of some of these writers may differ from those of the editors, yet the editors feel bound to give them to the public rather than entertain them themselves. But "reviewer" is after them like a little wagon, and is sure to overtake them. He was quite correct in saying in the last number of the INSTRUCTOR that "a majority of our contributors have but a limited experience, and keep but few bees, and when they get about so much knowledge they think they know it all, and commence instructing, etc." This is true in many respects, and no doubt will be for time to come. It is a fact that in all branches of industry we find those who are dogmatic at twenty are observers at thirty and "empirical" at forty. How egregiously do men err whenever they lose sight of facts and substitute their *ideas* as specious arguments in their stead. Let truth and falsehood grapple, for no one ever yet knew truth worsted in a free and open encounter. For one I am not for the ancients nor for the moderns, but for that free exchange of opinions that shall cause us to respect facts, let them come from what source they may—whether from the *big* or the *little* guns. One of the principal difficulties in the way to success is ignorance on the part of the apiarist. This, we understand, is what Friend House is trying to correct. And as to his question already quoted, we do not believe that practical apiarists

fail to contribute through fear of criticism, nor because they do not get sufficient pay. The practical apiarist has nothing to fear, unless he should make such a fearful blunder as did Friend House's "world renowned" queen breeder, when he made the bold statement through the leading bee journals of the world, that "Friend Moon says he does not breed queens that duplicate themselves every time in their queen progeny," but, says he, "*I do*, and hundreds of my customers can testify to it, and I breed from no others." Here is a broad statement coming from one who is claimed by "reviewer" to be of world-wide reputation as a queen breeder, and yet it is one of the greatest humbbugs of America, and is well calculated to lead the novice in apiculture astray. And for what purpose this is done the reader must draw his own conclusions, for when men refuse to come to a reference and back their own statements, the conclusion must be—"humbuggery." If we were to measure the height, length, breadth and depth of humbuggery, and were to notice its sublime impudence and glaring boldness, the world might be saved much of its present suffering. If history is correct humbuggery has to a great extent ruled the world from the earliest dawn of civilization to the present time. Our first parents were humbugged by the Evil One into the sin of disobedience, by eating of the forbidden fruit; and from that day to this mankind has been susceptible to such influences, and have permitted humbuggery to hold its sway in all branches of business, and to permeate all classes of society. A few months since a man came through this State hailing from Ky. He did not, however, come nearer to me than forty miles to do his dirty work. He was humbugging the people by selling them a patent Bee Hive, and as he was a fine talker his hive took well. Some parties who bought of him referred him to me, when he told them I had adopted his hive as one of the best, and besides told them that he gave MOON his first lessons in bee culture. This, of course, was a trick of humbuggery to get their money. I will give his name, also the name of his hive, in my next. He has gone to S. C., where he will no doubt continue to humbug the people.

The weather at present is extremely dry, and bees are doing but little. The season for honey, however, has been a remarkably good one, and all colonies

that were strong when the honey flow was so abundant collected a large surplus.

Rome, Ga., July 28, 1881.

We very much regret, Friend Moon, that you did not send us the names of this man and his hive so that we could have given them in this issue of the INSTRUCTOR. Such men ought to be so publicly advertised, if possible, as that everybody may avoid them as though they were cursed with the leprosy. And as this article seems to be penned principally to warn against humbugs, we would second the efforts of Friend Moon and say to the fraternity, be very cautious about taking hold of new-fangled moth-trap hives, or other strange devices for the apiary, if you do not wish your pockets depleted without any adequate return. We believe in cautiously trying everything that PROMISES SUCCESS, and in holding fast to whatever proves to be good. We do not care whether it comes from the A B C class or the old liners, if it is founded on FACTS deduced from experience or from experiments, we say amen to it. We, as editors, cannot, of course, always approve everything we publish. We give to the world as we receive, not always having time or space to comment upon the matter as we would like to. And not being by any means infallible we may possibly eulogize, at times, where we should condemn, or give our seal of disapprobation where we should approve. And as, "In the multitude of council there is wisdom," we hope to hear from MANY of our bee-keeping friends, even from both the young and old in the business. And as the husbandman does not expect to have all wheat and no chaff so we ought not expect our bee literature to be entirely free from chaffy productions. Our object however, shall be to winnow to the best advantage we can, trying to give that

which shall appear to us to be for the greatest good to the greatest number. Perfection can not be attained in any calling, but with reasonable effort the standard of our bee literature could be raised much higher than it now is.

For the INSTRUCTOR.]

Are we Really Prospering as Apiarists?

JESSE MILLER.

Already we see the results, in part, of a season of prosperity to the apiarist. In some localities there has been a great amount of honey gathered, while in others bees have so increased, swarming naturally (all efforts made to prevent it being unavailing) and artificially, until, from a look over the advertising pages of bee journals, the conclusion is almost forced upon us that bees never were so numerous or cheap as now, being offered for \$1.50 a full colony, Italian bees and queens at that (see Aug. *Gleanings*). Also Italian and Cyprian queens as low as 60c. each. What does it mean? Is it not time to "look a leedle out," go slow and with great care? Many will be induced to buy because of low prices, fail to build them up as they should; to secure strong colonies and good stores sufficient to winter well, such as will insure health, strength and bees in strong numbers. Some do not know how to care for bees and wont learn. They will set a hive beside the fence and leave the little fellows to take care of themselves; and with what results? Generally they die, and the owner wonders why. Then comes a condemning of bees, an assertion that the bee-keeper who sold them is certainly a swindler, a scamp; anything but an honest, good fellow, and should be exposed, *yes advertised.*

Why are our people so easily humbugged? Mainly from their great desire to get something for nothing.

Honest as bee-keepers are do not expect more of them than of other good men and women. Do not look for a strong colony of bees in a good hive for \$1.50, or a colony and hive full of honey, or in good condition for wintering, for three or four dollars, or any price much below their real value. A person may be compelled to sell and offer for a low price;

but generally good stocks will bring a fair price; and poor stocks of bees, as well as other things, are dear at a very low price, or often at any price.

A neighbor wanted good bees. He bought 6 young colonies of Italians at \$6.00 each, furnishing hives himself. By early fall they were in fine trim for winter. He heard of 15 swarms of blacks at \$3.00 each; bought them, hives and all. They were weak and in bad shape. To strengthen them he robbed his Italians, nearly ruining them. This is his third year. His stocks are much reduced, and while he gets very little honey, has fed a great deal. His expenses being high he wants to sell out. Bee-keeping don't suit him.

A beginner may be easily deceived. Often what costs but little is neglected. The prosperity of the apiarist is real. Care is most important. Here we have more than made up our losses of last winter in numbers of colonies, and with good preparation for winter the outlook is most promising. Blacks have done unusually well. Hybrids are not behind, but work well, are prolific, and fine honey gatherers, averaging better than any others. Italians have done fairly as to honey and swarming.

Those who heeded the good advice of our journals and saved hives, frames of comb, etc., carefully gave young swarms a good send-off, and were well repaid. Are apiarists not in better spirits, with a brighter prospect before them, than for many years? Then "hold fast" to the good, make assurance doubly sure, and a failure will be the exception.

Alliance, Ohio, August 5, 1881.

We see, Friend Miller, that you strike the key note to success. There is no business in which we may engage, in which greater care is required than in the management of bees. Everything should be done at the right time, with proper care and good judgement. Bad management is sure to bring disastrous results. To rob our bees of their honey about the close of the early honey season and trust to them building up from fall bloom, results, generally speaking, in leaving them in bad condition for wintering. If we make the mistake of robbing our bees too closely we

should feed up strong in the early fall that they may have time, before cool weather sets in, to seal over their stores in good shape for winter use. With a little care and a slight expense to each colony much may be done to avoid former disasters.

Scissors and Paste.

Mrs. Lucinda Harrison on Grape Sugar.

The following letter, taken from GLEANINGS, was written by Mrs. Harrison to congratulate its editor upon having decided not to recommend grape sugar to bee-keepers for use in the apiary. Mrs. Harrison illustrates her position with a vivid pen, and although she gets a little enthusiastic on the subject, we fear there is a great deal more truth than poetry in what she says:

FRIEND ROOT:—I extend unto you my right ~~best~~ in token of approval of your present position on that vexed glucose question. Your former one was always a sore trial to me; for I was fearful that the *money* that was in it, so warped your better judgment that you could not see it in its true light. When you invoked the blessing of Heaven upon the Buffalo Sugar Co., it was a dose too great for me to swallow, and the longer I chewed, the bigger it got.

Hamlin, who is the principal member of the Buffalo Co., has large works here (Peoria, Ill.), and has recently purchased an extensive tract of land in the vicinity of Des Moines, Iowa, to erect glucose works there. He has acres upon acres of lime-kilns to manufacture that compound for his manufactories. He knows no God and no Sabbath. His employees are not freemen, but slaves, compelled to work every day in the year, with the eye of a watchman upon them, lest they cease from their toil, and watchmen over watchmen, with small wages; and when he walks through his vast works, an armed guard protects him. The smoke from those vast chimneys never ceases, nor does the deadly waste that pours into

our magnificent river, to be the certain death of the finny tribe. The fumes that are wafted over our city, from the boiling vats of corn starch, containing deadly chemicals, can be compared to nothing else than to pens where a million pigs are kept and fed on distillery slops. We who have braved the privations of frontier life to obtain a home have no redress—for there are millions in it. Car-load upon car load of lime, nitric and sulphuric acid, are daily used in the manufacture of glucose. There have been syrups sold in this city that have eaten a hole in a table-cloth! This company have bought *chemists* as well as nitric and sulphuric acid.

But the people are awakening. They are inquiring why they feel so strangely after eating sugar and syrup, and what makes the little one's lips so black, as if it had been licking the ink-bottle, after its meal of bread and syrup—clear as honey.

Brother Root, you are a busy man, I know; but take time, and if you can't get time on a week day, do it on Sunday. Tie up your handkerchief full of your best Buffalo sugar; sit down by a pail of water, and wash it; and when you are through, tell us what you have left, and whether the water is sweet or not,—and what kind of stuff is left in your handkerchief. Be candid, and tell us all about it, if it does hurt worse than any bee-sting you ever had; and whether you would like to give it to Blue Eyes or the baby to eat.

I can not call down the blessing of Heaven upon the Buffalo Co.; but may Almighty God bless good father Langstroth, and continue unto him the use of his mental powers! May he long stand upon the watch-towers of this great industry, that he has given his lifetime to promote, and run up the signals of alarm in full view of his *bee children*, warning them of the vagaries of such impulsive persons as A. I. Root and—

MRS. L. HARRISON.

Peoria, Ill., July, 1881.

Following is Friend Root's reply:

Many thanks, my good friend, for the facts you have given us. I should have suggested that you were going as much one way as I did the other; but as you close by putting you and my poor self both in the same category, I guess I won't say much. The things you speak of are of course awful; but are you sure all su-

gar refineries do not present something of the same state of affairs; both in the way of chemicals and a disregard for the immortal souls of the employees? Are you not going a little on the same strain you did when you denounced comb foundation and all who made and recommended it; a few months ago? Begging your pardon, my kind good friend, while we are in the way of confessing our mistakes, would it not be well for you to recall some of those hard expressions you used there, to the effect that it was all done for the sake of the money that could be made at it? Most heartily do I join hands with you in all you say of our good friend Mr. Langstroth. In fact, I can join hands with you in the spirit of all you write.

From the American Bee Journal.]

A Colony Determined to Keep Two Queens.

G. H. GREEN.

I have fought the elements for eight months, and have had but little reward, except bringing my bees through with but little loss. The winter here was quite favorable for bees, though the spring has been the worst for bees that ever was known. My bees are now in prime condition for storing surplus. The basswood will soon be in bloom; we shall have an abundance of it, as the late rain has, with the warm weather, revived things very much. My bees are mostly Italians; I find them much ahead of the blacks. I own $\frac{1}{2}$ of a small apiary located at Charles Barker's; we have things in fine condition to produce honey.

I think we are fortunate; we have one colony that accepted 2 queens to lay, and seems to be perfectly thrown out of order when one is removed. I have removed 2 this season, and the bees were very much excited until they had another started. The first daughter hatched before there were drones. She remained with the mother about 10 days, when I removed her, and they at once made a queen-cell and the mother remained in the hive; the daughter became fertilized and also remained in the hive and laid about one week. I removed her and introduced her to another colony, where she is filling the combs profusely. I see to-day the parent colony has a queen-cell

with an egg in it, which proves that they are determined to have 2 queens. The daughters seem to be exactly like their mother. I value these queens much. I will report again hereafter.

Athens, Maine, July 11, 1881.

Question Box.

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

1. What benefit is it to have basswood, or linn, trees planted near the hive?
 2. Do they grow large?
 3. What size do they attain?
- Danby, Pa. J. A. DAMON.

1st. It will not be of any *great* benefit to have the grove nearer than one-fourth of a mile to your apiary. Some seem to think that bees will obtain just as much honey if the source of supply is two or three miles away as they would if nearer, but we can't agree with them. Our apiary is situated about one-third of a mile from a large grove containing several thousand large basswoods, and we get double the basswood honey that is obtained in another apiary one and one-half miles away; while another large yard three miles away from the grove, handled by an experienced bee-keeper, never gets a *smell* of basswood honey. Again, nearly three miles from here there was fifty acres of buckwheat last season, and while bees near the patch filled their hives to overflowing, ours did not gather a pound. This satisfied us that bees do not go as far after stores as many suppose. But unless you intend to keep bees for a considerable time, we would caution you not to invest too much money in any honey-bearing trees, as it will probably be a number of years before they bloom, and they may not pay you for your trouble and expense. If you think of planting *shade* trees, by all means plant honey-producing trees, such as maple, basswood, catalpa, etc., for they make very fine shade trees.

2d and 3d. Yes; they are among our largest trees, it being no uncommon thing to find specimens in rich bottom woods three feet in diameter and ninety feet high. If planted on thin soil they grow very slowly, but bloom much sooner than if planted in rich soil.

Should you intend planting we would advise you to obtain them as near home as possible, and save heavy R. E. charges.

This advice is also applicable to all bee-keepers' supplies. We have had experience, and know that it is better to pay a little more at home than to pay charges for four or five hundred miles transportation.

1. We have had considerable white clover in this vicinity this season, but the bees have gathered no surplus from it. What is the reason? It used to be the best honey plant we had in the east. Is it because of soil, climate, or what? Is there any plant that will take its place? Here on prairie soil I mean. E. H.

Crawford, Kansas.

1st. The yield of honey from any plant does not depend so much on the locality as the season. Last year we did not obtain a single pound of clover honey, although we were surrounded by hundreds of acres of pasture that was white with bloom. It is very easily affected by excesses of moisture or drouth.

2d. We advise you to try alsike clover. Our bees prefer it to the white, and as it succeeds well here on reclaimed marsh land, we think it will do well with you. The honey is a trifle darker than white clover honey.

Observing that the editor desires questions for the INSTRUCTOR, I take advantage of his liberality without apology:

1. I had a colony which would carry a handfull of brood to the entrance during the night, and continue carrying during the day, but stopped immediately after boxes were put on. To what would you attribute the cause?

2. If one should unite a pound of bees with a nucleus, would there be any danger of having the queen destroyed, providing both were well smoked?

3. How late in the season would it be advisable to divide, in order to increase stock?

4. During your experience which have wintered the better, blacks or Italians?

Frankfort, N. Y.

APIS.

1st. The phenomenon you mention frequently occurs late in the season, but seldom early unless the combs are infested with the larva of the bee moth (*Galleria cereana*), or the brood is injured by rough handling or some other cause. The most probable theory, however, is that they were either immature drones that they were dragging out, or else they were sacrificing their brood (as is sometimes the case) in order to store honey in the cells occupied by it, and stopped as soon as they were given more room. Should another case occur, please exam-

ine them closely and see if the wings of those brought out are not defective in some way. If not, give more room as before and report results.

2. No, not if honey was coming in, although if the queen was a valuable one we would cage her for an hour or two, or spray both lots of bees with sweetened water, to which had been added a few drops of peppermint or other strong essence.

3d. Cannot tell, not knowing what the latter part of the season will be. Do not divide so late but what you can build them up strong for the September honey harvest.

4th. Until last season the blacks were a little ahead. Then both suffered about alike, the difference, if any, being in favor of the Italians.

Editor Thomas calls attention on page 493 to the fact that the "Question Box" is dying out, and says it would gratify him much if more interest was taken in it. That's about the way we feel about it. We are neither omniscient nor infallible, but such information as we possess, or can obtain with reasonable effort, is at the disposal of all. We shall use back numbers of the several journals, and different books relating to bee culture, striving at all times to give due credit for what we copy; and if we get "swamped" we will acknowledge it frankly and ask for help. It is our wish that the "Question Box" may be as interesting and valuable to its readers as are the other departments of our inestimable little journal, and you may rest assured that we are and ever will be pleased to hear from any of you.

Editor's Corner.

Roe's summer and fall catalogue of small fruit plants and grape vines, from E. P. Roe, Cornwall-on-Hudson, N. Y., has lately been received. It is very full and complete, and is well worth writing for by anyone wanting anything in his line.

We move that a day of thanksgiving and rejoicing be appointed for bee-keepers all over the United States, to be kept in commemoration of A. I. Root's conversion on the grape sugar question. It isn't fair for Bro. Newman and Mrs. Harrison to do all the rejoicing.

The pathway of bee-keepers in California is not all strewn with roses, by any means, judging from the reports received from there. When it is a good season the bees make the honey fly, but it seems that bee keepers there are liable to just as bad reverses as we are here. It is an oft-quoted saying that "every rose has its thorn," and we suppose California is no exception to the rule.

Get up clubs for the INSTRUCTOR. Show it to your bee-keeping friends, and explain at what a low price it is published, and the large amount of interesting and valuable information they will receive during the year for the small sum of 50c., and see if they won't subscribe for it. We offer the very liberal cash commission of 15c. on each yearly subscription, and you can certainly make it pay you. Try it.

We have a small patch of the Simpson honey plant on which the bees have been busy for a month past. This plant, unless the weather is very dry, secretes honey during the entire day. It would certainly pay well to cultivate it largely, as it bridges over the gap between the summer and fall flow of honey, and continues on until killed by frosts. Let those who have the land to spare and time to cultivate it, try the experiment and see if it does not pay well.

And so it seems that at last, after all the trouble and expense D. A. Jones has gone to, he will have no colony of *Apis dorsata* to show for his pains, the two or three colonies that Frank Benton procured on the Island of Ceylon having died before he reached Cyprus. We think it is very doubtful that any bee superior to the best Italians will ever be found, but it is unfortunate that Mr. Jones, after the expense he has gone to, could not have gotten at least enough of the *Apis dorsata* to give them a fair trial.

The "Question Box" which should have appeared in the July INSTRUCTOR was sent us in good time by Mr. Wright, but was received one night when we were very busy, and after taking a cursory glance at it we laid it aside, it got mixed up with some old letters, and by some unaccountable fatality the fact of our receiving it entirely slipped our memory. The INSTRUCTOR was printed in due time, but minus the "Q. B.," we supposing there had been none for that month.

and imagine our surprise a couple of weeks later in finding it in the aforesaid pile of old letters. We give it this month, combined with the one for August, and hope the questioners will pardon our forgetfulness.

Since the first form of our journal, containing the reports from California, was put to press, we have received a number of later ones, all of which agree with those published in estimating the yield at from one-fourth of an average crop down. W. W. Bliss, of Los Angeles, kept a record of the weight of an average hive of bees from March 29th to July 31st, keeping it on scales and weighing it every evening, and sends us a very complete table of its weight at the different weighings. From it we find that the total increase in weight, during the whole four months, was only 25 pounds, or about what a good colony here would need to winter on. From his whole apirry of 130 colonies Mr. Bliss has only taken 1700 pounds of honey (extracted), and says that is about all he will get.

There appears to be quite a difference of opinion in regard to the disposition of Cyprian bees. Our experience with them has been limited to this season, and we cannot, of course, speak very decidedly in regard to them. So far, however, as our experience goes, we find them as gentle and easy to handle as the Italians. We handle them very gently and use but little smoke. We never use a veil or gloves, and frequently work among them with our sleeves rolled up to our elbows, and if stung at all it is generally from our own carelessness. We like the Cyprian well, so far, and believe that one of the most desirable crosses will be between it and the Italian. If the "little busy bee" is capable of development by crossing, American apiarists surely ought to be able to develop a wonderful bee from the numerous races brought from other lands, and now accessible to all who desire to try the experiment.

We hereby tender our thanks to the officers of the Cincinnati Industrial Exposition for their invitation to the forthcoming Exposition, and if it should be possible to do so we will certainly avail ourselves of it. Among all the expositions the larger cities of the United States have been holding for the last few years, that of Cincinnati stands at the head, and will well repay a visit.

Thanks are also due the St. Joseph Exposition Society, of St. Joseph, Mo., for a "complimentary" to their next exhibition, which commences Sept. 5th and continues six days. Their premium list is very full and complete, as we know from personal examination, and the management are exerting themselves to have the coming exposition surpass anything of the kind ever before held in that part of the country. Unlike many societies that we could name, they seem to be mindful of the growing importance of bee-keeping, the premiums in that department amounting to over \$120 cash (including about \$80 offered as special premiums by citizens of St. Joseph), besides a number of diplomas. The society has shown its wisdom in offering these premiums, as it can not fail to be of direct advantage to it, besides serving as a good example for other societies to follow.

We would give a list of the premiums offered, but as it would take up considerable room, and probably be of no benefit to the majority of our readers, we will refer those desiring the information to the premium list of the society, which will no doubt be promptly sent on application to the Secretary, Chas. F. Ernst, St. Joseph, Missouri.

THE COMING NATIONAL CONVENTION.

The time for holding the next annual convention of the North American Beekeepers' Society, at Lexington, Ky., has at length been fixed upon by the Executive Committee, and in a recent letter the President informs us that it will commence on Wednesday, October 5th, and continue over the 6th and 7th. Lexington is a very centrally located point, being easy of access from every direction, and in addition is situated right in the center of the famous "Blue Grass" region of Kentucky, and we hope that beekeepers everywhere—North, South, East and West—will exert their utmost efforts to make this Convention what it should be, and what it is expected to be—the largest and most influential meeting of beekeepers ever held in America. The time selected for the meeting is during the Cincinnati and Louisville Expositions, the St. Louis Fair and the great Cotton Exposition at Atlanta, Ga., and delegates passing through those cities can get the advantage of excursion rates. Mr. Wm. Williamson, of Lexington, has been appointed a committee to receive exhibits

for the Convention, and persons intending to exhibit anything will please send them to him, prepaying freight or express charges, and if desirous of selling, attach a card to the article, stating the lowest price in plain figures. The Society has made a wise choice in the selection of Mr. Williamson for the position he holds, and exhibitors may be assured that everything will be conducted fairly, honestly and impartially. A programme of the proceedings will be printed and distributed some time before the Convention meets.

AUGUST AND SEPTEMBER MANAGEMENT.

By this time of the year the honey season, save in favored localities, is about past, except what is gathered from fall bloom, and this cannot be relied upon for building up colonies for winter. Some seasons bees will gather a sufficient amount of good stores from fall bloom to carry them through the winter. Other seasons the fall supply is light and of poor quality. This being the case strict attention should be paid, that we may know just what our bees are doing, and if necessary to keep up brood rearing, and prepare for winter, we should feed them on good sugar syrup, to whatever extent needed. This should be done (especially where close extracting is carried on) in good time for the stores to be sealed over. It sometimes happens that a large surplus is gathered in the fall. In such cases if there is more than is needed for winter, keep on surplus boxes or, as some would say, use extractor. Our advice, however, would be, do not use the extractor on the combs of the brood chamber.

As queens are cheap at this season of the year, it is a good time to Italianize. Young, laying queens introduced from now until the middle of September, will, if properly managed, build up colonies strong in young bees to go into winter quarters. No queenless stocks should be kept later than the last of September, unless fertile queens are expected to be introduced shortly, and in that case the queenless colony should be kept up by a comb or two from some colony able to spare them. Keep no old queens, even if you have to purchase young ones, as a young, vigorous queen will build up much better for winter than queens three or four years old. Equalize by taking from the extra strong and giving to the weak, and in this way build up all colo-

nies strong, so as to prepare in good time for the coming winter's siege.

A WORD OF WARNING.

Right here and now we wish to give a little advice to those who are tempted through its cheapness to feed grape sugar for winter stores to such of their bees as need help by feeding, and that is, *don't do it*. For feeding in the spring, or through the summer at times when the honey flow is scant and the bees need a little "boosting," grape sugar *may* do well enough; or bees might survive on it, and even come out in good condition in the spring, if used for food during very mild, open winters, when they could have frequent purifying flights. But it is running a *very* great risk to feed it in the fall, as no one can tell with any certainty what the winter will be, it being just as apt to be cold and severe as mild and open. As an instance of the evil results of feeding grape sugar for wintering, we will give the experience of an extensive bee-keeper with it the past winter, as related to us by him. We do not know whether he would want his name mentioned, and therefore withhold it, only saying that he doesn't live in Ohio. In the spring of 1880 he had 600 colonies. The season was *very* poor and his bees produced no surplus whatever, not gathering even enough to winter on. He was therefore forced to feed them, which he did, the feed consisting of grape and coffee sugar mixed. During the summer his bees had decreased, instead of increasing, and he only had 450 colonies at the commencement of winter. They were wintered in cellars and bee houses, and out of that large number put away in the fall, about half a dozen colonies were left in the spring, or were when he wrote to us the first time, during the forepart of April. We received a second letter from him later, which we are unable to find now, in which we think he said he had none left at all. At any rate he had so few left that they amounted to comparatively nothing. No wonder he said, "no more grape sugar for me for wintering."

The above is only one case out of many, as those who read the bee periodicals carefully will see, and we think it would be well to profit in the future by the lessons the past has taught, in this case as well as every other. So far we do not think a better feed has been made, considering quality, cheapness, etc., than

symp made from good coffee A or granulated sugar, two parts sugar to one of water (the proportion of sugar should be a little greater if for late feeding), and so we shall continue to use it. What are the opinions of our readers on the subject?

Honey and Beeswax Markets.

REPORTED FOR THE INSTRUCTOR.

BOSTON, August 9.

Honey—Comb, new, 18@25c; strained, new, 10@12c.

Beeswax—25@30c. CROCKER & BLAKE.

CINCINNATI, August 8.

Honey—Demand is getting to be a little better generally. Comb, 14@16c. Extracted brings 7@9c on arrival.

Beeswax—20@22c. C. F. MUTH.

CHICAGO, August 9.

Honey—New crop white clover and basswood in 1 to 2 lb sections selling at 20@22c. Extracted, 8@9c. The demand as yet light, although some dealers have bought a winter's supply, claiming it better to do so now than later, price and quality considered.

Beeswax—18@23. R. A. BURNETT.

NEW YORK, August 8.

Honey—The present quotations for NEW are as follows: Best white comb, 17@20c; fair white comb, 15@16c; dark comb, 12@14c; best white extracted, 10@11c; dark extracted, 7@8c.

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

H. K. & F. B. THURBER & Co.

ST. LOUIS, August 8.

Honey—There is very little or nothing doing now. What stock we hold for our shippers we have placed in a cool cellar. Weather has been too hot for consumers or dealers to invest. We look for an active market and good values as soon as cooler weather sets in.

Beeswax—Prime yellow, 21c.

R. C. GREER & Co.

CLEVELAND, August 8.

Honey—Honey in unglazed sections is in excellent demand. 1 lb sections bring 19@20c; 2 lb, 17@19c, but should be in nice crates with glass sides. Extracted honey not quite so ready sale at 12@12½c in tin cans.

Beeswax—20@22c. A. C. KENDAL.

SAN FRANCISCO, August 3.

Honey—Stocks on hand are small, and difference in views between buyers and sellers prevent any movement except in a retail way; still, honey is firm at 8½@10c for extra choice and white, and 6½@8c for dark and candied.

Beeswax—Is firm at 23@25c.

SMITH & HATCH.

Convention Directory.

1881.

Oct. 4—Eastern Michigan, at Detroit. A. B. Weed, Sec., Detroit, Mich.

6—Union Kentucky, at Shelbyville. G. W. Demaree, Sec., Christiansburg, Ky.

5-7—National, at Lexington, Ky. Frances Dunham, Sec., DePere, Wis.

11, 12—Northern Mich., at Maple Rapids. O. R. Goodno, Sec., Carson City, Mich.

11, 12—Northeastern Wisconsin, at Pewaukee. Frances Dunham, Sec., DePere, Wis.

12—Central Ky., in Exposition Building, Louisville. W. Williamson, Sec., Lexington, Ky.

25, 26—Northwestern District, at Chicago. C. C. Coffinbury, Sec., Chicago, Ill.

27—Central Michigan, at Lansing. Geo. L. Perry, Sec.

27—Western Michigan, at Berlin. Wm. M. S. Dodge, Sec., Coopersville, Mich.

Nov. 30—Southwestern Wisconsin, at Platteville. N. E. France, Sec., Platteville, Wis.

1882.

Jan. 25—Northeastern, at Utica, N. Y. Geo. W. House, Sec., Fayetteville, N. Y.

April 11—Eastern Michigan, at Detroit. A. B. Weed, Sec., Detroit, Mich.

27—Texas State, at McKinney, Texas. Wm. R. Howard, Sec.

\$72 A WEEK. \$12 a day at home easily made. Costly Outfit free. Address
3-2 TRUE & Co., Augusta, Me.

Fifty Cents PER POUND.

From this date I will sell BLACK BEES at the above low rates. These bees are obtained of parties who wintered successfully. The bees are hardy.

Bees by the pound.....\$ 50
With black queen..... 1 00
With Untested Italian Queen..... 1 50
Three-frame nuclei with Untested Italian Queen, two for..... 5 00

Orders promptly filled. Address

JOHN H. MARTIN,
Hartford, New York.

BOOKS FOR BEE-KEEPERS.

COOK'S MANUAL OF THE APIARY is one of the latest additions to bee literature, though by no means least. It is particularly valuable to the scientific bee-keeper (although in part II, under the head of "The Apiary, its Care and Management," instructions are given that the most inexperienced can understand), as in it Prof. Cook has opened up a hitherto unexplored field, by giving a full description, illustrated by numerous engravings, of the physical structure of the Honey Bee. It is fully illustrated and handsomely printed and bound. Price, in cloth, \$1.25; paper, \$1.00.

QUINBY'S NEW BEE-KEEPING, by L. C. Root, is a handsomely illustrated, well-bound book of plain, practical information for bee-keepers. Its author is himself a bee-keeper—one who makes that his business—and is therefore peculiarly well fitted to give that information to bee-keepers that is most useful to them. Cloth, \$1.50.

A B C OF BEE CULTURE, by A. I. Root, embraces "everything pertaining to the care of the apiary," arranged in the handy Cyclopædia form, and contains much useful information, both to the novice in bee-keeping and the experienced. Cloth, \$1.25; paper, \$1.00.

THE BEE-KEEPERS' TEXT BOOK is one of the older works on bee culture. It has lately been re-written and revised by A. J. King, and is now fully up to the times. Cloth, \$1.00; paper, 75c.

BEE CULTURE; OR SUCCESSFUL MANAGEMENT OF THE APIARY, by Thomas G. Newman, presents, in a condensed form, instructions for the successful management of the apiary. Published in English and German. Price for either edition, in paper, 40c. each; per dozen, \$3.00.

THE DZIERZON THEORY, by the Baron of Berlepsch, presents the fundamental principles of bee culture, and furnishes a condensed statement of the facts and arguments by which they are demonstrated. Paper, 15c.

HARVESTING, HANDLING AND MARKETING EXTRACTED HONEY is the title of a very neat, thorough and exhaustive pamphlet on that subject, by Charles and C. P. Dadant. Price, 15c.

The above are all sent by mail, post-paid, on receipt of price. Address

W. THOMAS & SON, Adelphi, O.

Imported Italian QUEENS!

Just received: Another invoice of these valuable bees, **Selected** under my own instructions and **Fully Guaranteed**. Bee breeders, send in your orders for the next shipment, which leaves Havre, France, July 20th. Particulars upon application, and references given when desired.

Queens of every variety carefully bred. Send for circular and price-list.

710 CHARLES H. LAKE,
259 Greenmount Ave.,
"Sunny Side Apiary." Baltimore, Md.

BEE-KEEPERS,

It is to your interest to buy only those queens whose progeny are the

BEST HONEY GATHERERS

Our strain of bees have given us over 100 lbs. of box honey per colony both in 1879 and 1880—both poor seasons. We send out only the best, and guarantee them equal to any in America. Tested queens, \$2.50. \$1 queens furnished when we have them, but are not always reared in our apiary. Also, see ad. in back numbers of the Instructor.

Special inducements to those wishing to subscribe for the Instructor.

F. L. WRIGHT,
PLAINFIELD, MICH.

\$66 a week in your own town. Terms and \$5 outfit free. Address
H. HALLETT & Co., Portland, Me.

SEND FOR OUR 8-PAGE CIRCULAR

(with cuts and illustrations)

OF HIVES, ONE-PIECE SECTION BOXES, COMB FOUNDATION, SMOKERS, AND ALL SUPPLIES NEEDED IN THE APIARY. ALSO:

Italian and Holy Land Bees and Queens.

Try our

AMERICAN BEE FEEDER.

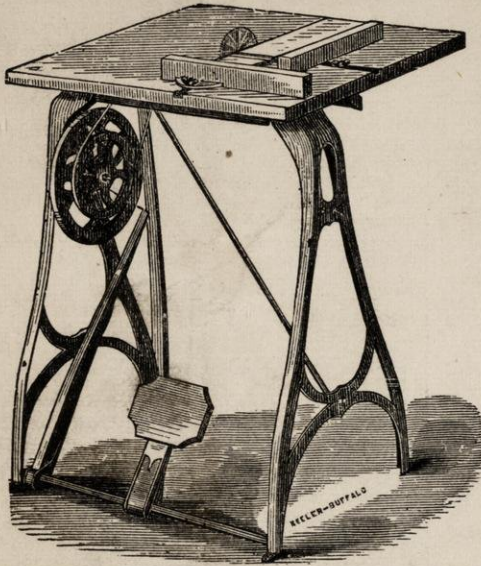
Single Feeder by mail 25c. Half dozen by express \$1.20. One dozen, \$2.00.

RIEGEL & DRUM,
ADELPHI, OHIO.

4 6

\$5 = \$20 per day at home. Samples worth \$5 free. Address
STINSON & Co., Portland, Me.

BARNES' PATENT FOOT POWER MACHINERY.



CIRCULAR and SCROLL SAWS. HAND CIRCULAR RIP SAWS, for heavy and light ripping. LATHES, &c., &c. These machines are especially adapted to **HIVE MAKING**. It will pay every bee-keeper to send for our 64 page Catalogue.

MACHINES SENT ON TRIAL IF DESIRED.

Write for complete Illustrated and Descriptive Catalogue (stating where you saw this advertisement) to

W. F. & JNO. BARNES,
ROCKFORD,
Winnebago Co., - - Ill.

BUY THE BEST!



The best informed bee-keepers in the U. S. say that our **DOUBLE-DRAFT QUINBY SMOKER**

Is decidedly the **BEST** now made. Hetherington discards all others, and orders two dozen for his own use. Doolittle says it is not equaled. So say all who see and use it. Price, by mail, **\$1.50** and **\$1.75**.

OUR BOOK, **Quinby's New Bee-Keeping,**



Continues to grow in popularity, and is the most practical work published. Price, by mail, **\$1.50**.

We sell everything used in Advanced Bee Culture. Send for Illustrated Circular to

L. C. ROOT & BRO.,
MOHAWK, NEW YORK.

4-9

In answering advertisements don't forget to say you saw them in the INSTRUCTOR.

1881. 1881. **ITALIAN QUEENS**

Bred from Imported mothers of our own importation, for the year 1881, Tested, **\$3.00** each; also colonies and nuclei from home-bred stock. No imported queens for sale.

We also breed the celebrated Mocking Bird, which is acknowledged to lead the feathered songsters of the world.

Send for price-list. Satisfaction guaranteed.
 3-12 A. F. MOON, Rome, Georgia.

15 ONE-CENT STAMPS

Will pay for our exhaustive pamphlet on raising, handling and marketing extracted honey.

COLONIES WITH

Imported Italian Queens,

Of our own Importation, Guaranteed Pure and Genuine. Our **Comb Foundation** was awarded the diploma at the N. E. Bee-Keepers Convention held in February.

SMOKERS, KNIVES, EXTRACTORS, &c.

Price-List, with 3 samples of foundation, free.
 3-8 CHAS. DADANT & SON,
 Hamilton, Hancock Co., Ill.