

The bee-keepers' instructor. Vol. III, No. 9 September, 1881

Adelphi, Ohio: Webster Thomas & Sons, September, 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.



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 minion, 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 Send for estimate. page or over.

Advertisements changed quarterly, if desired, and all advertisers will receive the INSTRUCTOR free, provided their advertise-ments 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.



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 Ital-ian queens, comb foundation, Langstroth and Gem hives and Apiarian 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. VIALLON, 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., breeeder 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 :

DEE-	KEEPERS' INSTRUCTOR	50c
With	American Bee Journal\$200	\$2 20
"	Bee-Keepers' Magazine1 00	1 25
"	Gleanings in Bee-Culture1 00	1 30
"	Bee-Keepers' Exchange	1 10
"	All the above Bee Journals	4 20
"	The Bee-Keepers' Guide	80
"	The Kansas Bee-Keeper 30	70

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 Co., N. Y.

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	CO
With Untested Italian Queen 1	50
Three-frame nuclei with Untested Ital-	
ian Queen, two for 5	00
Orders promptly filled Address	

orders promptly filled.

JOHN H. MARTIN, Hartford, New York.

THE KANSAS BEE-KEEPER

A neat sixteen column paper

Devoted Exclusively to the Best Interests of Those who Keep Bees.

Subscription only 30 cents a year. Trial subscription three months for two 3-cent stamps. Sample copies free. Don't fail to send for it. Address

SCOVELL & ANDERSON. 912

COLUMBUS, KANSAS.

ALIAN and Albino queens as cheap as the cheapest and as good as the best. Untested Italian queens, 75c. each; half dozen, \$3.50. Albino queens, \$1.00 each; half dozen, \$5.00 J. M. C. TAYLOR, Lewistown, Fred. Co., Md.





VOL. III. ADELPHI, OHIO, SEPTEMBER, 1881.

Published the middle of each month.

W. THOMAS & SON, Publishers and Proprietors. Terms, 50c. per year, or 30c. for 6 months.

No. 9.

Programme for the 12th Annual **Convention of the North Amer**ican Bee-Keepers' Society,

TO BE HELD IN THE ODD FELLOWS' BUILDING, AT LEXINGTON, KY., OCT. 5th, 6th AND 7th, 1881.

WEDNESDAY, OCT. 5.

MORNING SESSION.

10 to 12.—Convention called to order. Reading minutes of the last meeting. Reading of correspondence.

Calling the roll of members for last year, payment of annual dues, receiving new members, and distribution of badges.

President's Annual Address.

Reports of Secretaries, Treasurer, Standing Committees and Vice Presidents.

AFTERNOON SESSION.

1 to 5.-Appointment of committee to nominate officers for the coming year, to report Thursday morning.

Addresses, to be followed by discussion; The New Bee .--

Prof. A. J. Cook, Lansing, Mich. Foul Brood among Bees.— C. F. Muth, Cincinnati, O.

Can Honey be Made a Staple Product?-

C. C. Coffinberry, Chicago, Ill. Report of honey crop for 1881.

EVENING SESSION.

8 to 9:30.-Receiving new members. Miscellaneous business.

Addresses, to be followed by discussion: Wintering.

C. J. Robinson, Richford, N. Y. Progressive Bee-Keeping; or the Stepping-Stones Toward Perfection .-

Thomas J. Newman, Chicago, Ill. The rest of the evening will be de-

voted to a social interchange of views between those present on any topic desired.

THURSDAY, OCT. 6.

MORNING SESSION.

9 to 12.-Report of nominating committee. Election of officers, and installation.

Addresses, to be followed by discussion:

In-Breeding .- P. P. Collier, Mexico, Mo. Bee-Culture .- Past, Present and Prospective.-

Rev. L. Johnson, Walton, Ky. The Different Races of the Honey Bee,

and their Geographical Distribution .-Dr. J. P. H. Brown, Augusta, Ga. How to Prevent Swarming.-

C. P. Dadant, Hamilton, Ill.

Obstacles to Progressive Bee-Culture .---G. W. Demaree, Christianburg, Ky.

AFTERNOON SESSION.

1 to 5.-Ballotting for time and place of next meeting.

Addresses, to be followed by discussion :

A free-and-easy, go-as-you-please Recital of a Bee-Keeper's Holiday .-

Rev. W. F. Clarke, Listowel, Canada. Wintering Bees in Texas.-

Dr. Wm. R. Howard, Kingston, Texas. Swarms vs. Comb Honey .-

Dr. C. C. Miller, Marengo, Ill. My Experience; or How I Learned to

Handle Bees Profitably .-

Dr. E. Drane, Eminence, Ky. Dysentery in Bees, and Its Causes.

W. Thomas, Adelphi, Ohio.

EVENING SESSION.

8 to 9:30 .- Miscellaneous business.

Addresses, to be followed by discussion :

The Honey Bee and Its Relation to the Science of Economies.-

Hon. Mellville Hayes, Wilmington, O. Social Interchange of Views on Miscella-

neous Subjects by Those Present.

FRIDAY, OCT. 7.

MORNING SESSION.

9 to 12.-New business, resolutions. etc.

Addresses, to be followed by discussion : The Origin of the Present Races of Bees.-

E. E. Hasty, Richards, O. The Wintering of Bees.—

C. F. Muth, Cincinnati, O. Is Bee-Culture a Suitable Employment for

Women?-Mrs. L. Harrison, Peoria, Ill. Bee-Keeping as a Business, or the Sole

Vocation of an Individual.— W. J. Davis, Youngsville, P.a.

AFTERNOON SESSION.

1 to 5.-Reading of correspondence.

Addresses, to be followed by discussion: Breeding to Improve Bees.

C. J. Robinson, Richford, N. Y. The Influence of Honey on Wintering.—

Chas. Dadant, Hamilton, Ill. Honey Bee Literature—What it Is, and What it Should Be.—

Judge W. H Andrews, McKinney, Tex. An essay (subject not yet stated).---

A. J. King, New York City. Essays are expected from Wm. Carr, Newton Heath, England, and other

European apiarists.

Final business, and adjournment.

Our Contributors.

For the INSTRUCTOR.]

Review No. 5,

GEORGE W. HOUSE.

The INSTRUCTOR for August at hand. We are pleased to know that it is progressing and improving with each month. The information regarding the yield of honey in California is of great value to eastern bee-keepers, and alone worth more than the yearly subscription.

Friend Underhill in his "Criticisms" on page 501 seems to be laboring under wrong conclusions in regard to our ideas on the effects of cold weather during winter on bees, and says our "critic" "remains silent, and passes the article of Mr. Doolittle." Owing to a lack of time and space we wisk to avoid as much as possible a repetition of our views on the various questions appearing in the IN-STRUCTOR. Friend D. has surely said enough that every one should know his views on wintering, etc. If Friend Underhill reads the INSTRUCTOR he should have known our views on this question ere this. We will refer him to pages 435, 473 and 497, and if this is not sufficient we will give our views in *full* in next INSTRUCTOR for Friend U.'s benefit,

On page 423 Friend U. says: "But to those who would make this national industry a success, there is yet a wide field for study. 'We refer' directly to those diseases which sweep off whole apiaries, the accumulation of years of labor and toil, in a single month." In speaking of this on page 434 we said we were not aware that any such diseases ever existed; and, seeking for information, asked Friend U. to explain. On page 501 he "attributed those diseases to too cold weather or too open hives, which caused bees to freeze to 'death." Surely freezing can not be a disease ! But a little further along he asks this question: "Does every stock that dies pass off with the dysentery ?" We suppose he asks this question for information, and will answer him in the negative; and inasmuch as he' asks the question, he surely can not attribute such sweeping mortality as he has mentioned to dysentery. Now, Friend U, wont you please tell the readers of the INSTRUCTOR what diseases there are (if any) that "sweep off whole apiaries in a single month ?"

On same page Friend U. says: "On page 473 we find our critic quoting the language of Mr. Doolittle, from the 17th to the 25th lines, inclusive." This we most emphatically deny. We are not aware that we have quoted this from Friend D. The lines referred to are purely our own. Re-read and consider, Friend U.

On page 503 Friend Klinger says: "If we wish to prevent in-and-in breeding we must fertilize in confinement," etc. At present there are several distinct strains of Italians in this country. They are in the hands of practical apiarists, who understand their business, and we believe there are no better bees in existence. If we wish to infuse new blood into our apiary, we think the safest and most practical way is to purchase one of the best queens owned by these apiarists, or exchange one of our best for one of their best, and rear our young queens from this source and cross them with our drones. In purchasing a queen for this purpose, however, the utmost care must be taken to know that she is from a man that is perfectly reliable, and whose stock is what he represents it to be, or we may spoil that which we are striving so hard to attain.

We think Friend Moon, in his article on page 504, a little fast in referring to "Friend House's 'world renowned' queen breeder" as he does. Our statements were made in strict accordance with our actual experience, and as we have no ax to grind, our judgement, we think, is unbiased; furthermore, what we said in that respect can be substantiated by other able and practical apiarists. Before drawing conclusions it would be well for the reader to remember that the gentleman referred to and Friend Moon are two old rival queen breeders. If Friend Moon thinks that there is any "humbuggery" about it let him say who the guilty person is. Do not withhold the name of any "humbug." But give us the name, together with the full particulars in the case, that the accused may have a chance for defence.

On page 505 Friend Miller says : "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." Friend M., why did you not tell us what you consider their real value? As we are advertising 100 colonies, and inasmuch as Friend M.'s remarks have a tendency to depreciate their value in the eyes of the inexperienced, we claim the right of defence. We have offered these bees at \$4.50 each, and if Mr. M. can find better hives, with better comb or better bees, in any better condition for wintering, etc., we will give him the whole lot. We have offered them at this low price, be-cause we can afford to sell for that price and guarantee satisfaction. We can afford to sell for the price named because we make apiculture a specialty. We do not believe in fancy prices, but "quick sales with small profits." The apiarist that makes the most money from a given number of colonies, or his business, is both the most practical and the most successful. Those wishing to purchase will buy where they can buy the best for the least money. When a man makes queen breeding a specialty we see no reason why he cannot sell queens, by the quantity, at 60 cents each, and good queens at that.

The circumstance Friend Green refers to on page 507 is what we call superseding the old queen, and is of frequent occurrence, especially at this season of the year. Queens reared under such impulses generally prove to be among our very best. It is not advisable to take away the young queen as Friend G. has done. But if the colony is such as he would like to breed from, he could cut all the cells but one, and introduce them in other queenless colonies after cutting *their* cells. Under such circumstances the old queen is often allowed to remain in the hive for some little time.

On pages 511 and 512 our worthy editor asks for the opinion of his readers on the subject of the best feed for feeding purposes. Undoubtedly the syrup mentioned by Friend Thomas is the very best feed, outside of honey. We seldom use a bee feeder or any artificial feed. We think pure honey the best and cheapest feed known. If we have any colonies short of the necessary stores to carry them through the winter, we supply their wants by drawing from those that have to spare. If we have no such colonies to draw from, we give them partly filled sections, and the bees will remove the honey very rapidly, or the honey may be extracted from the boxes, and fed the same as syrup. We believe in making our bees self sustaining.

Fayetteville, N. Y., Aug. 24, 1881.

We think we are always ready to give everyone their full meed of praise, and we would fully agree with you, Friend House, if you would say that Mr. Alley is ONE of the best queen breeders in the world. He has been in the business longer than most breeders, and is probably more widely known, but when you say he is the BEST breeder in the world we must differ with you there. We think there are numbers of queen breeders in this world that breed just as good queens as Mr. Alley does (although that is no disparagement to him). and many, probably, that breed just as largely and do as much business in that line.

For the INSTRUCTOR.] How Swarming is Conducted.

G. M. DOOLITTLE.

In the July No. of the American Bee-Keeper I see Mr. Harrison, the editor, says he did not know that the young bees left the parent hive at the time of issuing of the first swarm, and in the Kansas Bee-Keeper for August I see that the editor of that paper says that the young queen hatches in less than 24 hours after the swarm has issued, and becomes fertilized before the larva is all sealed up.

Coming as these statements do, from as high authority as editors, they ought to be correct; nevertheless all our experience with natural swarming goes to prove them as incorrect. Therefore if editors who are apiarists are not sufficiently posted to know how, and under what conditions a natural swarm issues, it might be well to have a little light on this subject for the rank and file of bee-keepers. I have also used natural swarming as a means of increase, and experimented largely to know under what conditions swarms issued, as a rule, and have found (in regard to age of bees) that bees of all ages in about equal proportion leave the parent hive, from the old forager to the bee that has not been out of his cell but a few hours. Many times have I seen the ground in front of the hive nearly covered with bees so young as to be unable to fly, and as often have I seen the veterans with their jagged wings hanging with the swarm. Thus we have the field bees, the wax workers, and the nurse bees in about equal proportions, thus showing that the Allwise Creator knew how things should be when he pronounced all he had made, good. That this division of bees is just as it should be is the reason why I prefer natural to artificial swarming. But let us look inside the hive when preparations for swarming are being made, and see if we can not arrive at the truth of the matter, as regards the conditions under which the swarm issues, when the first queen hatches, etc. The first indication of swarming is the laying of eggs in the drone comb. While eggs in drone cells are not a sure sign that swarms will issue, as far as I have observed swarms never do issue without eggs laid therein. If the weather is propitious the next step is the building of queen cells, soon after which the queen deposits eggs in them. In three days these eggs hatch into larva, and said larva is fed an abundance of food by the nurse bees for about six days, when the cells containing the embryo queens are sealed over. If no bad weather has intervened the swarm issues the next day, the old queen going with the swarm. Now, bear in mind that this is the rule with the black bee and generally

with the Italians; still, the Italians often swarm when the eggs are first laid in the queen cell, and sometimes without the least preparation at all except drones. All good authorities allow that the queen larva remains seven days in the cell, as our experience also proves, and we can not see how friend Scovell, of the Kansas Bee-Keeper, should make such a mistake as to say the queen hatches in 24 hours. When bad weather occurs the thing is possible for the swarm to be kept back six days and then issue, in which case the first queen would hatch in 24 hours. But this is something I never had to occur but twice since I kept bees, for in such a case the bees generally destroy the queen cells, and postpone swarming for an indefinite period. So I find, as a rule, that the first queen emerges from her cell from six to seven days after the first swarm. If more swarms issue they usually come out two days after, or from the 8th to 9th day after the first, and never later than the 16th day. As soon as it is decided that no more swarms shall issue all queens in the cells are destroyed, and in from 5 to 9 days the queen goes out to be fertilized, two days after which she commences to lay. Thus it will be seen that in no case except where a first swarm has been kept back by bad weather is it possible for the young queens to be fertilized before the larva are all sealed up. This, in short, is as I find the condition during natural swarming.

Borodino, N. Y., August 24, 1881.

For the INSTRUCTOR.] Notes on Various Subjects. E. T. FLANIGAN.

I can say that I have tried the plan of introducing queens as given by Mr. Geo. W. House in the INSTRUCTOR for July, and it works like a charm. The queens were very valuable, one of them being a Holy Land, or "Syrian" queen, as we all ought to unite in calling them.

In regard to the article by Mrs. Harrison in the same number on selling bees by the lb., I wish to say that a swarm of 12½ pounds is an exceptional one, and that the greatest call for bees by the lb. is in the early part of the season, when few if any colonies weigh over 5 or 6 pounds. If Mrs. H. were to try the business awhile, and make or procure the packages the bees are sent in, make good all losses to customers, and allow for the labor of catching and shipping them, she would not think \$2.00 per lb. early in the season, and \$1.00 later on, any too much; especially if the risk of taking too many bees from the old stock, and the brood thereby perishing and the colony being lost, is taken into consideration. I would rather receive any other order in my line of business than one for "bees by the lb.," and I think bee keepers who have sold in that way, even at \$2.00 per lb., have lost more than they made.

The weather is extremely hot, the thermometer standing for hours at a time in the middle of the day at 102° to 104° in the shade. Several of my nuclei in dark-painted hives have melted down. I find it hard to get queens to laying promptly, and attrib-ute it to the extremely hot weather, the scarcity of pasturage, and the lack of drones. I have fed the stock containing my imported Cyprian queen liberally and constantly, but in spite of all I can do they are daily employed in killing off their drones, and I will have to keep a small colony queenless in order to have enough drones to fertilize, the young queens. If any of your readers know of any other method of keeping a supply of drones during the period of scarcity, they will do a favor by making it known.

I must compliment you on the appearance and "make up" of the INSTRUCTOR, as well as the general excellence of the matter contained in it. I am sure that to many beginners the method given by Mr. House of introducing queens without loss of time, and how to get rid of fertile workers, are worth half a dozen years' subscription. Am sorry you could not supply me with the full set of Nos. for the current year.

Belleville, Ill., Aug. 11, 1881.

Our view of the matter was the same as yours, Friend T., about the 12½ pound swarm being an exceptionally large one, but we said nothing at the time the article was published, feeling sure that some of our correspondents who had had experience in the matter would reply to it. Would it not be well for all of us, friends, to be more careful what we write and say, and not be so hasty in pronouncing judgment until we are reasonably certain of being right? We acknowledge that it is difficult for fairminded persons to view what they consider a palpable imposition without pitching into it, but would it not be best to be sure that it is an imposition first? "Charity suffereth long and is kind," and if we all exhibited more of it for our fellow men, and were less ready to impugn and criticise their motives, the world would be the gainer by it.

For the INSTRUCTOR.

Building Up From Nuclei to Full Stocks.

H. L. JEFFREY.

In looking over the August number of the INSTRUCTOR, when I came to the 3d paragraph of the second column, page 497, I read it over, admiringly, three or four times, and although short (it might have been extended to three or four columns) found it long enough to set any apiarist thinking to good purpose. I have noticed for six or seven years past, that whenever I united two or more weak colonies to make one fair one, that in a week or two they were no better off than before, except what little the hatching brood helped; and many of the eggs seemed to be drawn out of the cells or perished. But if a frame well filled with hatching brood was put in the center of the brood chamber, taking out one of the poorest filled combs from the weak stock and giving it to the strong one in place of the frame of brood taken out, thus giving them both the same space as before the exchange, the weak stock will soon be seen to double in strength, while the strong one will not be perceptibly weakened, and will work just as hard, and sometimes harder, we have thought, for the stirring up they get during the operation. And by nearly the same plan nuclei can be built up into valuable colonies at this season of the year, with good results, by uniting and exchanging their brood, instead of uniting bees and brood in a body. It is a better plan, I am sure, though more work. I will try and explain how it is done: In the first place select a stand with the strong nucleus on it that you wish to make into a strong stock. Take the bees, and all

the frames containing larva to any extent, from the nucleus, put them in your hive and place it on the stand previously occupied by the nucleus. Then take from all or any of your nuclei, frames of capped and hatching brood to fill up the hive to a strong stock. The nuclei can be kept by closing down with the division boards to suit, until four or five frames of brood have been taken from each, to use for building up into full colonies. I have often noticed that when bees from several nuclei were put together they were either killed, died off, or left quite rapidly, often letting most of the larva starve. I have tried both plans, and very much prefer the use of hatching brood, to the uniting of bees as generally practiced.

The honey crop with us has been fair, but accompanied with altogether too much swarming, and a great and unaccountable disappearance of queens. Old and young, it made no difference; they would be seen one day, and upon looking for them, again the next week the combs would be found covered with queen cells. Who can account for such actions?

Woodbury, Conn., Aug. 23, 1881.

For the INSTRUCTOR.]

Report From South Michigan.

JAMES HEDDON.

Knowing the advantage it is to honey producers generally to keep posted each year on the crop at large, I take this opportunity to state the yield of this section, amount of increase, etc.:

As regards increase bees did fully as well as usual. This increase was very acceptable to bee-keepers, as about ninetenths of the bees in this part of the country were killed by the past severe winter, and perhaps three-fourths over the country generally, thus making bees a staple article. Owing to this increase, the early surplus crop amounted to about one-third of the average yield. The fall harvest (which commences in Aug. and ends in Sept.) is now nearly one-half over, and as we have had no rain for 30 days, the indications are that not onethird of a late crop, will be gathered. This luck, after the loss of \$1,000 worth of bees the past winter, and just about as poor a yield of surplus honey last season as this, all coming inside of eighteen

months, makes the business look serious indeed. But I suspicion that he who stands by the business in these times that try our nerve will deserve and will get the patronage of the honey consuming public.

I am frequently asked if my supply trade is not the better business of the two. To this question I will say that up to the present time my income from surplus honey has had to supply the loss in the supply trade, but I hope I am now getting things in shape so as to make a profit on the last named branch of my business. It is the profits on the large yields of surplus honey, gathered three, four, and five to ten years ago, that enables me to stand the extreme reverses I have been experiencing.

How our bees are going to stand the coming winter, is with us among the things of the future. If thick, rich honey was the key to success, we would feel encouraged, but we have had the experience of seeing our bees die upon stores of solid, capped sheets of basswood honey. The amount of pollen carried into the hive is the point at which we are looking. We have, however, ceased to fear winter losses since last winter's experience. We can well bear the loss of one-half, and as we saved nearly that proportion of our colonies during the worst season ever known here, we feel safe in anticipating plenty of bees for our fields the coming season. At present we have 250 colonies, which we think just 150 too many for one apiaryspring count.

The apiary I advertised for sale in the spring was sold for \$1,137. Though but a small portion of the amount was paid down, even in this poor season the purchaser is going to live and satisfy the claims against it, and surely going to pay for the place out of its earnings-soon, too-and with less labor than farming requires. Farms in this part of Mich. (which is known to be an A No. 1 agricultural district) are scarcely paying any dividends, this year of drought, above labor put upon them. I have every reason to believe that for an average of ten years, 100 colonies of bees properly managed, in a good location, will pay a larger net profit than 100 acres of good land. In my judgement there is a brighter outlook before us than ever before since I have been an apiarist.

Dowagiac, Mich., August 22, 1881.

For the INSTRUCTOR.]

A Short Sketch of Our Apiary.

HOW IT IS MANAGED AND THE RESULTS OBTAINED. NO. 1.

JESSE MILLER.

Last fall we had in our yard six colonies of bees, two in chaff, two in Langstroth and two in Simplicity hives. The L. and S. hives were put in boxes, well packed in chaff, chaff cushions over the frames, and a good entrance given. They had plenty of good capped honey for winter, and were all left on their summer stands. Their last fly was December 5th, bat there had been several weeks of cold, wet weather previous to this. They had no more fly until in February, as the weather continued severely cold with snow on the ground most of the time. To this date the result was, one colony of beautiful Italians in L. hive dead, caused by dysentery. They were placed on six frames, had a young queen, were excellent workers and had an abundance of stores when they succumbed to that terrible scourge-dysentery. All my bees had been put on from five to six frames in the fall, and protected by division boards and chaff cushions. Early in April they were carefully looked over, hives cleaned out and bees put on four or five frames to the colony with a view to spreading them a la Doolittle as occasion required. Results to April, weather cold, damp and disagreeable-young brood in three hives, one very weak with no brood, and one in chaff hive dead, caused by dysentery. This colony was given a tested queen too late in the fall to breed up fully, only showing part Italian workers. We now had two good colonies, one fair and one very weak, making four in all. Fed syrup in small quantity to stimulate brood rearing. Three queens went to work in good earnest, one being ready for an extra frame in about eight days, and for an additional one about every three or four days thereafter until the hive was filled. The second needed a frame added every five to seven days until filled. The third was slower, filling their frames very full, and when these (fine yellow Italians) had seven frames well filled with brood, out came a large swarm June 11th, much to our disappointment. We now filled hive No. 3 with frames, giving one broad

frame with eight one pound section boxes, to try side storing. We also gave Nos. 1 and 2 a frame each of same kind, and as they were very full of bees put sections above to give room for storing honey, and to some extent assist in preventing swarming. We now gave No. 4 another frame, not because it was really needed. but because we thought it might have been. This colony had a large, wellmarked queen-a thing of real beautybut her progeny were small, black and wicked, and as an old apiarist said, without a drop of Italian blood in them all. Next came our difficulty in Italianizing this colony. The first queen sent me arrived dead. 'The second came in good order and was introduced, but in due time out came blacks. The colony is now queenless awaiting the arrival of queen No. 3. This colony has done no good this season.

When swarming commenced it seemed to be in good earnest, as the following will show: No. 3 cast swarms June 11th, 21st and 24th. No. 2 June 12th and 22:1, and No. 1 June 15th and July 1st. Six of these were hived in good condition, but the 7th, a small swarm, escaped to the woods.

Alliance, O., August 22, 1881.

From the way you write, Friend Miller, we judge that you destroyed the queen in colony No. 4 because she bred black bees. This we would not have done until we were able to supply her place immediately. By so doing you place your colony in a condition for dwindling, unless you take from the strength of other colonies to keep it up. Besides this the longer a colony is queenless the greater the difficulty to introduce a fertile queen. There is also danger that you may be troubled with the fertile worker unless your colony has eggs or young larva from which to rear a queen. No colonies should be left in a queenless, unprovided-for condition for any great length of time, as they are liable to become troubled with fertile workers. You seem to have managed your bees in most respects very well, but if we had been handling them and wished to keep them from swarming we would have oc-

casionally formed a nucleus from the three strong colonies, and from them built up No. 4 good and strong early in the season. We have an idea you might by this process have formed from three to four good new colonies, and obtained considerably surplus besides. To operate in this way requires close watching that the bees do not get the start of us and swarm in spite of our precautions.

For the INSTRUCTOR.]

Have we Reached the End? Mixing Up, etc.

A. F. MOON.

For years much has been said and written concerning the improvement of the Italian bee and of their superiority over our native bee. How far true progress has been made is left for bee-keepers to decide.

As few of us are above being advisedneither are we too old to learn anything which may better our condition-we propose to say a few things relative to the improvement, and the modus operandi in which it has been carried out. There was a time when "ignorance was excusable," when knowledge was beyond the grasp of man in bee culture; but that time has long since passed. Men have learned by experience the best time and method of propagating and improving the honey bee. To make improvements requires "time, care and energy," and with bees perhaps greater care than almost any kind of stock bred by man, from the fact that mating or impregnation takes place in the open air, which puts the matter of controlling it beyond our power. However, we can aid them by keeping none but the highest strains of purity, and by a careful and judicious selection of both queens and drones, in a short time valuable improvements can be made. But how is this to be done? when such a large number of our queen breeders are engaged in raising and shipping the different races of bees into almost every district where bees are kept. If these different races of bees are bred in the same apiary or neighborhood, and sent to every part of the country, then we see

either race, unless a cross from the pure Italians would better their condition. But the chances for pure blood is out of the question, and leave a doubt in the mind of every practical breeder in the country.

The first drawback in breeding the Italian bee in its purity in this country was the mixing with the native bee. However, this could be very well mastered, as the two colors were so diverse to each other (and both breed to color) that when a cross took place it was sure to show itself in both very plainly. The second difficulty, and a still more serious one, was that of the dollar queen business. This soon flooded the country with a mixed stock that was a sore trial to any person who attempted to breed them in their purity. Perhaps one-half or more of the queens sent out were impurely mated. This being true any person can see what the breeder that was trying to breed pure bees had to contend with. And we were sorry to see that some of our old breeders were ready to fall into line, when this general wholesale business commenced. Then arose a serious difficulty, for as a general thing the Italian bees were not what they were in their introduction to this country, and for years after; nor were they to be compared with the imported queens of to-day. Third: To cap the climax and put on the finishing touch came the Cyprian, the Holy Land and Hungarian races. Some of our breeders, who wanted "to do good of course," and knew that "new brooms always sweep clean," wheeled into line of march and came to the front at once. advertising these new races for sale, and hundreds who have got the pure Italian bees will send for one of the new kind, as they are the best. He takes them into his apiary, and how long will it take before this same person cannot tell whether he has a pure bee of either kind, and besides all this conglomerated, mixed-up mess, his new-fangled, high toned bees have mixed with his neighbors' Italians; and here is another serious evil-a double and treble dose for the breeder of pure stock; a mixture that he cannot locate himself, as they resemble each other in color so near that Mr. Alley says it is almost impossible to detect or tell one from the other, and he further says he would like to see the man that "knows more about them than he does," and he is advertising the Italian, Cyprian, Holy but little chance for improvement of Land and Hungarian races for sale.

"Julius Cæsar !" Only think of it! Any man that can keep and breed so many races for sale and keep them all pure is ahead of the times, and bee-keepers demand to know the manner of breeding and keeping them pure, providing any one has such a process. Such a person can immortalize himself by just giving the great secret to the public, that we all may rely upon getting a pure race when ordered.

We see that our old friend Dadant has repented and "kicked against the pricks." When we saw Mr. Dadant's advertisement of a new bee we were surprised that a man of his experience would take a new race of bees into his apiary with his Italians, but his short and valuable experience with it corresponds with N. C. Mitchell's "beautiful Egyptians." We hope Friend Dadant will not send those few left, to any one to curse their stock. Why should our breeders engage in the sale of a stock of any kind without first having the proof that it is better than those they already have? Besides, what can any practical breeder think of in mixing up the races this way?

Now, Mr. Editor, we expect some of those noted breeders will speak out, but we hope all will not speak at once. One or two at a time and we will try and handle your cases with gloves on, and show what is being done by those who deserve the praise: and the injury done by others to successful breeding of bees in this country. We will show that the Italian bee by the present course of breeding will soon degenerate to a "mixed-up mess of mixtures."

Rome, Ga., August 24, 1881.

For the INSTRUCTOR.]

A Little Chat About Wintering.

J. KLINGER.

The time is now here to begin to make preparations for wintering our bees, if we would winter them successfully. The great danger we are in is this: In our eagerness to get large returns, we are too apt to use the extractor to so late a day that the bees have neither the time nor the means to gather sufficient honey to carry them over winter. I extracted a little, as I stated in my last, quite early, and have gone over my hives cautiously a second time, extracting from the combs on the outside of the brood nest what I

thought they could spare. I got the very best thick, sealed over, white clover and linn honey. The honey flow ceased about this time, and the combs have not been filled up since. I got about 120 lbs. at this last going over, which I have sold readily at 121 to 15 cents per lb. One of my neighbors owing me some honey I saved but little of my own for my family. But after trying my neighbor's honey I find it much inferior to my own. Whether this is attributable to the locality, or to the fact that it was extracted before it was sealed over, I do not certainly know. but I am inclined to believe it was ex-tracted before it was sealed, and being unripe and watery a slight degree of fermentation has taken place. From my own observations I feel pretty sure that bees never seal over their honey until it is well evaporated and, so to speak, in a ripened condition. They then seal it up air tight and it keeps as well as our canned fruits. It may be, however, that the canning process ripens the honey. I wish that some one who knows would give us full information on this subject. I am aware that there is quite a difference in localities in the quality as well as quantity of honey to be gathered by our bees. My old friend, E. Bues, of Forest, Hardin county, O., usually gets a large yield of honey from golden rod after I get nothing. But I think the honey is of an inferior quality, though it may be just as good for bees to winter on as any. He tells me he has no trouble in getting plenty of honey, but always finds diffi-culty in wintering his bees. He winters in a bee house made for the purpose, and it may be that he makes the mistake of putting his bees in too early or too late. or of putting them out too early in the spring. At one time he tells me he lost his bees by having too much honey. They were so full they had no place to cluster but on massive sheets of honey, and of course a man might almost as well attempt to winter his bees over on cakes of ice as to winter on full combs of honey. So it is evident that if the bees have too much or too little honey they are not properly prepared to winter safely.

During September is a good time to see after their condition for wintering. Now, if your bees need any protection for winter, one of the cheapest and at the same time one of the best modes of protection is simply to put a shock of corn fodder over each hive, leaving a sufficient opening in front for the bees to pass out and in. It keeps off all wet and snow, and absorbs the moisture so as to keep the bees dry. The opening may be made by parting the stalks on the front side of the hive, or tie the shock very tight at the top and then cut off the stalks just above the entrance to the hive. Husks or corn cobs placed on the top of the frames where the hives have sufficient space above, make a good absorbent protection. I propose to winter on summer stands, and believe if the above precautions are taken that we may all winter successfully, providing our bees are raised above the ground so as not to draw dampness from below.

Little Sandusky, O., Aug. 24, 1881.

Letters.

ROME, Georgia, Aug. 25, 1881.

MR. EDITOR:—1n my article for the Aug. No. of the INSTRUCTOB I spoke of a man who was selling a patent bee hive in this State, who claimed that "he had given MoON his first lessons in bee culture." The following letter from Mr. J. J. Ingheam, Calhoun, Ga., who bought of him, speaks for itself:

"A. F. Moon,—Dear Sir: The name of the man who has been selling the patent hive styled the "Golden Bee Hive," is B. Pickerl. His address was Nashville, Tenn. He went from here to Greenville, S. C. Said his hive was patented in 1877, and claimed to have given you your first lessons in bee culture. Would write more but the train is coming."

Mr. Ingheam is a high-toned gentleman, and what he says may be relied upon. Will get more facts and send in. Would simply say that I never saw this man Pickerl who claims to have given me my first lessons; neither have I seen his hive. I would much like to see his phiz and hear him talk a few minutes. Pass him around; he may get picked up yet. I will address a line to the post-master of the place where he went, requesting it to be forwarded to him. A. F. Moon.

FULTON, Ohio, Aug. 19, 1881.

FRIEND THOMAS:—A few days ago I received the INSTRUCTOR for July, and can not tell you how glad and thankful I was to see it. I miss it very much, and hope I may be able to send for it before

the commencement of another year, along with two or three new subscribers. I have ofttimes felt like sending you a little report of my bees' doings, but shrank from it, fearing that you were already burdened with such communications. Out of eleven colonies I had last fall, only two lived to see the flowers, one of which dwindled to a mere handfull, and only survived by the most careful nursing. The other one was one that I considered least likely to winter, as they cast a young swarm as late as the last of July, and were then so unfortunate as to lose their young queen, and had to rear another from brood I gave them. Their provision being scanty, I gave them about four pounds of section honey and a card of sugar caudy on top, and left them packed in chaff like the rest. When spring opened they were not very strong, but I fed them pretty freely of honey, of which there was an abundance left in the hives of those that had died, and they increased in strength rapidly. On the 15th of June they sent out a nice swarm, on the 24th a second, on the 25th a third, and on the 27th a fourth, and are now rich in all bees require to make them happy. The first swarm sent out a swarm about the middle of July. Have not fed them since they commenced swarming. The young swarms are doing nicely. I have taken about 50 pounds of honey. RACHEL HEALD.

We do not know whether or not the above kind and chatty letter was designed for publication, but we hope our friend will excuse us for reproducing it if it was not. One object we have in publishing it is to call attention to that portion where the author says, "I have ofttimes felt like sending you a little report of my bees' doings, but shrank from it, fearing that you were already burdened with such communications," etc. Perhaps many bee-keepers feel that way, and yet we do not know why they should. We have repeatedly invited such correspondence, and are always glad to hear from our friends in the business, whether they take the INSTRUCTOR or not, naturally giving preference in publishing correspondence, however, to

522

As edthat from our subscribers. itor of a bee journal it is our business to hear from you. Your successes and failures, your trials and "triculations" (to use Mother Partington's expression), are all of interest to us, and if we can not at all times publish your communications, recollect that we are pleased to hear from you anyhow. Your letters are always welcome, and we hope no one will be deterred from writing because they "fear we are already burdened with such communications."

PLAINFIELD, Mich., Aug. 25, 1881.

FRIEND THOMAS :- We would be first to sustain your motion on page 509, were it not that we deem it a little premature. Not long since an insane man in our vicinity took it into his head that it was his duty to convert a half-witted brother of his whom he believed to be very wicked. After laboring with him for a considerable time he (the sinner) announced himself converted, whereupon his adviser eaught up a pitch-fork and declared it was his intention to kill him, "for," says he, "if you don't die right off you'll just as like as not back-slide." We, of course. don't advise that any such vigorous measures be used upon our good friend Root, so but let's see if we can not, now while he is in a repentant mood, get up something that will so distract his attention from grape sugar, etc., that he will banish it from his apiary, his price-list, *Gleanings* and all. When this is done we will hold up both hands to your proposition and will swing our hat the longest and hurrah the loudest of any of you; but until it is done we don't feel like rejoicing much, for we fear he'll back-slide.

F. L. WRIGHT.

If something to distract his attention is what is needed, Friend W., we think he has it, sure enough, in the Burch affair, which bids fair to cause him enough trouble to "distract" his attention for some time to come. It is his own fault, however, as much as anybody else's, for trying to conduct his journal on such an extraordinary business plan, and while we sympathize with him in his trouble, we can not help but think that if this experience teaches him that his plan is wrong, both in theory and practice, it will not have been in vain.

Editor's Corner.

Don't forget the National Convention. It promises to be the the largest and most influential meeting of bee-keepers ever held on this continent, and it will pay you to be there.

One of the neatest and most artistically printed magizines we have ever seen is the *Poultry Monthly*, published by the Ferris Publishing Co., Albany, N. Y. The reading matter is fully equal in excellence to the printing, which is about the highest praise that could be given it.

There is one point in regard to Friend House's method of introducing queens on which we, and doubtless many of our readers, desire some information, and that is, will the plan work where colonies have been several days queenless? Judging from the nature of the case and the directions given we should say not, but still we do not know. Let us know how it is, Friend H., in your next.

One Professor, one Judge, one "Hon.," two preachers, three editors and five doctors, are represented in the programme of the National Convention. What an array of titles and talent! Of course the Prof., Judge, doctors, etc., don't amount to much, but just think of the—ahem editors, three of them to boot. Why, it would be worth a trip to the Convention to hear them.

Since assuming control of the IN-STRUCTOR we have paid special attention to giving full and accurate reports of the principal honey markets of the county, and can confidently assert that no other journal published has equaled ours in this respect. All our quotations are fresh and reliable, and can be depended upon, and are in every instance, so far as we have been able to ascertain, from the leading dealer in each place named.

Friend House says that Doolittle has said enough about bees freezing to death, but Doolittle evidently doesn't think so, for we have an article from him on that subject, which will appear in our next issue. And, by the way, Dr. Stevenson, of Morenci, Mich., partly promised in the May No. to give us the results of some experiments bearing on the matter, which we have not yet received. Send them along, doctor; as it seems the subject is about to be reopened, they may prove interesting.

The honey markets still continue dull, and prices are mostly nominal, owing to the continuance of the hot weather. Active markets and better prices may confidently be looked for upon the approach of cooler weather, and we would advise producers who can do so to hold their crop until then. Dealers dislike to handle honey in such hot weather, especially comb honey, and it is neither to the advantage of them or the producer to put it on the market then.

The weather over the country generally has been very hot and dry for a month or more past, which will doubtless make the fall crop of honey a lightone. Some portions of the country, in fact, have had no rains of any consequence for over two months, and the result is that crops of other kinds, as well as honey, will be very light. The honey crop in this part of the country has not been an average one by considerable, the season having been most too dry from the beginning, but still bees have gathered enough to winter on, aud some surplus besides, so we have no great reason to complain.

Every bee-keeper of limited experience should have at least one good work on bee culture, for by referring to it when you are sometimes in a quandary as to what to do, you will often find just the information you need to help you. If you are intending to make bee-keeping a business, and follow it for the money that is to be made at it, we know of no work superior to "Quinby's New Bee-Keeping," as far as solid, practical in-struction is concerned. If, on the contrary, you follow the business more as a pastime, and for a love of it, and desire to know all about the anatomy and phys iology of the honey bee, "Cook's Manual of the Apiary" is probably the best work you can get. Both works are good, and no one could make a mistake by purchasing either; but for practical, everyday use, we think the first-named work the best, because it is written by a practical, successful apiarist, who makes beekeeping his business, and therefore knows from personal experience just what he writes about.

Before another number of our journal is issued the time set for holding the National Convention will have come and gone, and we take this last opportunity of urging upon bee keepers the importance of their making every effort to be there. It can not fail to be a help to you in every way. The mutual interchange of thoughts and opinions, the relation of the various experiences, the generation of new ideas and the development of old ones, the free discussion of the many topics of interest, and the pleasant friendships formed-all can not fail to be of benefit to the participants, and their value is not to be estimated in dollars and cents. Look at the programme to study it carebe found elsewhere; then ask yourself fully, and this question : "Can I afford not to be there." The subjects to be discussed are all worthy of any bee-keeper's thought and attention, some of them being of national importance, and treating on subjects of the most vital interest to the science of beakeeping. There will be essays and addresses from some of the leading, most practical and successful apiarists of America, and dull, indeed, must that bee-keep. er be, who could not learn enough by going to well repay him for his time and expense.

Should nothing unforeseen occur we expect to be present, and exchange a warm hand-shake with many of our brother bee-keeepers who are so well known to us by their writings as to almost seem personal friends, but should Providence decree it otherwise, we will be there in thought and spirit, at least, and join in imagination with the exercises of the occasion.

SEPTEMBER AND OCTOBER MANAGEMENT.

Now is the time for adopting such measures as may be necessary for making complete arrangements for wintering. The exact condition of every colony should be determined during September. See to it that every colony has a queen, and if the honey flow is not sufficient to keep up brood rearing, feed lightly with good sugar syrup two or three times a week. It is important that brood rearing be kept up until in October, in order that there may be plenty of young bees for wintering. Minute instructions can not be given for all circumstances, as different localities differ so much, especially in the fall flow of honey. The best advice that we can give is, to be governed by the condition of each colony. If lacking in stores and there is not a good prospect for them to fill up before the flowers are killed by the frost, feeding should be resorted to, the feed being given as rapidly as the bees will take it, until they are filled up. This should be done in this month or early in October, so that the stores may be fully sealed over before cool weather sets in.

Combs containing the greatest amount of bee-bread should be placed at the outside of the brood nest. Bees need but little of this kind of food after brood rearing ceases until it commences again in the spring. Begin to equalize your stocks, and if feeding for wintering place them on the number of frames you expect to put them on for the winter, unless the quantity of bees is too great to allow it. Bees should not be too much crowded until after the warm weather is past. As the weather grows cooler they can be crowded in less space. As our next number will be devoted to a considerable extent to the subject of wintering, we will defer to that number to give final preparations for preparing for winter.

ORIGIN OF DRONES.

Under the above caption C. J. Robinson, in American Bee Journal of August 24, gives us another article on the origin of drones, and controverts the theory of parthenogenesis in the honey bee. He claims, as he had set forth in a former article, that queens are impregnated with royal jelly (drones' semen) while they are in the larval state, to that extent that enables them to lay eggs that will hatch drones. This doctrine of Mr. Robinson's certainly opens up a large field for speculation, investigation and discussion. According to his theory royal jelly and drones' semen are one and the same thing. Who will undertake to confirm or con-trovert this theory? It would seem to be an easy matter to test the correctness of the theory by rearing queens in a colony where there are no drones, but when we come to examine Mr. Robinson's former article in the Journal of March 23, we find that he has fortified himself by saying that the drones, in addition to fecun-

dating the full grown queen, "also deposit their semen where the workers can obtain it in the absence of the drones to perfect queens, and for storing it in their combs, where it retains its vitality at least from the time that the drones are expelled until they are reproduced the following season." According to this theory the drone semen possesses a most wonderful vitality, which is entirely at variance with anything that we have ever read or heard of in animated nature. It may be difficult (though it is not generally thought to be) to establish the doctrine of parthenogenesis; but a belief in it certainly cannot require a greater amount of credulity than to believe that the life principle or vitality of the drone semen will live (so to speak) for months by being stored in the combs of the hive, to be used as occasion muy require, for th perfecting of queens.

But it was not our intention to discuss this question, but to simply call attention to a few points connected with it, and leave it to abler pens to take up the gauntlet thrown down by Mr. Robinson.

CAN FOUL BROOD BE TRANSMITTED IN WAX MADE FROM INFECTED COMES?

The above question was asked by Friend Kepler, of Napoleon, Ohio, in the IN-STRUCTOR for June, but never having had any experience on that point we could give no definite answer. The question is a very important one to those beekeepers who buy foundation, for they have no means of knowing where the wax comes from originally, the manufacturers of the foundation themselves not knowing but that a portion of what they use comes from infected apiaries. Foul brood is not a very prevalent disease, and the risk is not therefore so great as it might be, but still there is a risk if it can be carried in foundation. It is generally considered, we believe, that the heat necessary to render the wax destroys the germs of the disease, but either the general opinion is a mistaken one, or the person mentioned in the following letter was mistaken. The letter is from S. S. Butler, M. D., of Los Gatos, Cal., and is as follows:

"I notice a question in the June INSTRUCT-OB in relation to using wax rendered from combs taken from hives infected with foul brood. In reply I would say, don't use it. It is sure to earry the infection with it if used for foundation, and I think, if the truth could be known, there has been a good deal of it spread in that way. A friend of mine, residing about fifteen miles from here, proved conclusively this spring that the disease is carried in the wax. It was in nearly all of his hives before he found it out, and so he had to go over them all. He gave me a full history of the case, which I will perhaps write out in full for you or get him to."

Write it out and send it to us by all means, Friend B., or else get your friend to. If such a terrible disease can be carried in foundation, it is time bee-keepers were knowing it, so that they can be on their guard. We must confess that we have hitherto been of the general opinion that the heat necessary to render the wax destroyed the germs, but as there is nothing like practical experience to test such questions, we hope you will give us a full history of the case as you propose. If any more of our readers have had experience in the matter we would like to hear from them also.

SOMETHING ABOUT ADVERTISING.

It is a well established fact among our most prominent business men that nothing pays better than judicious advertising. While this is the case, it is no doubt a fact that persons are often disappointed in the returns from their advertising, and sometimes come to the conclusion that it don't pay. This generally results, we think, from the manner of advertising, and, without pretending to know all about it, we will give our readers our ideas on the subject. From the nature of our position we are thrown in contact with advertisers, and know considerable about the success or nonsuccess of a good many of them, and we therefore think our advice worthy the consideration of those interested :

In the first place, one of the main requisites of successful advertising is to advertise constantly. Don't expect to advertise for two or three months out of the year, and get big returns by it. You can't do it. By advertising steadily the readers become familiarized with you, and when they order anything they will naturally send to the one (other things being equal) that they have the most confidence in—and nothing begets confidence like steady, liberal advertising.

In the second place, if you advertise at all, advertise liberally. We don't mean by this that a small advertisement don't pay, but we do mean that the larger your advertisement is, the better it will pay in proportion. Now, it may seem to some that we are writing this for our own interest, but nevertheless it is the testimony of some of the foremost business men of the country. Small advertisements usually get half smothered up among the large ones, and, although they may pay, it may be considered that, as a rule, the returns from a large advertisement will be more in proportion than from a small one.

Another important matter to be considered is the display of the advertisement. One fault many advertisers have is that of crowding their space, which should never be done. Room should always be given for an attractive display, for that is what makes the paying advertisement, and no one understands this better than the experienced advertiser.

In conclusion we would say, if you wish to increase your business, advertise. Advertise constantly and largely, and it will not only pay you, but pay you well.

AN ODD WAY OF DOING BUSINESS, AND HOW IT IS RESULTING.

A. I. Root, editor of Gleanings, has always advertised that he would be responsible for his advertisers, and now seems to have gotten himself into quite a predicament in consequence. Herbert A. Burch, alias H. A. Burch & Co., of South Haven, Mich., has been advertising bees, queens and supplies very extensively, both through Gleanings and several other bee journals, and by means of circulars, and as he offered everything very low, and claimed unusual excellence for what he sold, he received a great many orders and a good deal of money as the result. It now transpires that he has not been acting honestly with his customers, having not filled their orders in the majority of cases, and up to date claims amounting in the aggregate to over \$1,700, from persons who have sent him money, have been . received by Friend Root, and "more coming by every mail." How the matter will eventually be settled we do not know, but our opinion is, that, to say the least. it was an injustice to himself for Friend Root to become surety for the hon-esty of his advertisers. Any publication, no matter how carefully conducted, is liable to be "taken in" occasionally by dishonest advertisers, and if, after the editor has taken every precaution to guard against such an occurrence, he should be imposed upon by such an ad-

vertiser, and the readers of his journal lose something thereby, should he stand all the loss? We answer most emphatically, no! and we think nearly every fair-minded person will agree with us. Gleanings is the first and only publication we ever knew to be conducted on such a plan, and we think this experience ought to teach its editor that it is radically wrong. It is not only a temptation to dishonest practices on the part of advertisers, but on the part of those who lose by such advertisers as well. Let us illustrate: Up to this time claims amounting to over \$1,700 have been preferred against Mr. Burch, part of which Friend Root, if he keeps his published word, is bound to pay. Now the question arises, as part of that money was sent by persons who seen Burch's advertisement in other journals, and in the circulars he sent out, how much of it ought Mr. Root pay? It would manifestly be unjust to have him pay more than the orders for supplies amount to from those who were induced, by seeing his advertisement in Gleanings, to order of Mr. Burch, but how is that proportion to be decided? Evidently there is no other way of doing except to take the word of those interested, and as every person in this world is not strictly honest, and most persons are naturally loath to lose their money, we fear some would be greatly tempted to say that they had sent to Burch from seeing his advertisement in Gleanings, when they had not. Take out that guarantee, Friend Root, and it will, in our opinion at least, be better for you, your subscribers and your advertisers.

FOUL BROOD.

The following question from W. G. Wright, Delphos, Ohio, came too late to be sent to the editor of the "Question Box," and we will therefore answer it to the best of our ability, hoping that Bro. Wright, of the "Question Box," if he can give us any more light on the subject, will do so next month for the general benefit of the readers of the INSTRUCTOR. It reads as follows:

"FRIEND THOMAS:—Is there a disease in bees called foul brood? If so, what will cure it? or is it incurable? I have two or three colonies that one-half of the brood dies after it is scaled over, and has quite a bad smell, and think that is probably what is the matter with them."

In answer to the above we are sorry to say there is such a disease, which, although

at one time thought to be incurable, is not so considered now, as by experiments and scientific research, remedies have of late years been discovered by which it is claimed the disease may be effectually overcome and driven from the apiary. The description you give of the condition of your bees seems to strongly indicate the presence of foul brood, and yet it may possibly be brought about by some other cause. If, however, your colonies are strong in bees so that the brood has been well protected, we would have the gravest fears that your bees are affected _ with this dread disease. We have sent you the Feb. No. of the INSTRUCTOR for 1881, which contains an excellent article on this subject from Mr. W. A. House, of Fayetteville, N. Y. By reading this carefully and examining your bees thoroughly, you will doubtless be able to determine as to whether they are diseased or not. If the cells are somewhat sunken, with a small hole in the center, it is suspicious; and if on opening the cells you find the larva dead, dark and putrid, it is almost a sure indication of the presence of foul brood. Larva that has perished for the want of protection may present quite a similar appearance, and before pronouncing upon it we should want to know what had been the previous condition of the colony. In fact, we have thought that the disease might possibly originate, at times, by the decomposition of chilled brood under certain conditions during a certain temperature, and favorable conditions of the atmosphere.

No one, so far as we are aware, has yet undertaken to say positively just how this disease originates, but while this is the case, it has been determined by microscopic investigation that it is a species of minute fungus growth, or what we might call microscopic vegetation. When once satisfied of its presence we should adopt the most energetic and heroic measures to get rid of it. If an apiarist has many colonies and only a few are attacked, he had better burn the few and get rid of the pest at once. Even after this is done great watchfulness is necessary to see that it does not spread by having been previously carried to other hives supposed to be healthy. There is not much doubt but what the disease can be cured if proper care and vigilance are exercised. Prof. Cook in his "Manual of the Apiary" gives an excellent recipe for its cure from Charles F. Muth, of Cincinnati, as follows: 128 grains of salicylic acid, 128 grains of soda of borax and 16 ounces of distilled water. Spraying the combs well with this fluid (the brood having first been uncapped) is said to be fatal to the fungi, while it is harmless to the bees.

While foul brood is not of common accurrence of late years, it is well enough for us all to be on our guard, and where we have the least suspicion of its presence we should never rest until we determine the matter. A very few days tolerating it in an apiary might be attended with the most fatal results.

In conclusion, Friend W., as we judge from your inquiries that you are not taking any bee journals, we would advise you to subscribe for several, and read them carefally, and thus keep posted on the latest developments in the science of apiculture. If you can afford it, take them all, every "dod-gasted" one, but if not, take one at least. If you were a reader of the bee journals you would have known that there was such a disease as foul brood, and also the best means of eradicating it. It is false economy not to take any of the bee periodicals because they cost a little money, and most beekeepers find it out sooner or later.

Honey and Beeswax Markets.

REPORTED FOR THE INSTRUCTOR.

CINCINNATI, August 30.

Honey-Demand for comb honey is slow. A choice article brings 16@17c on arrival. Supply and demand is fair for extracted, which brings 7@10c on arrival.

Beeswax-20@22c. C. F. MUTH.

CHICAGO, August 30.

Honey-The dry, hot weather I am inclined to think is the cause of our quiet market, the demand being almost limited to present wants, which seem to be few. Prices same as last month.

Beeswax-18@23. R. A. BURNETT.

NEW YORK, August 31.

Honey-We quote: Best white clover or linn honey in 1 or 2 th sections, 18@20c; fair white clover or linn honey in 1 or 2 th sections, 15@17c; dark or buckwheat in 1 or 2 th sections, 12@14c. Large sections 2c per to less than above prices. Best white extracted honey, 10@11c; dark or buckwheat, 7@8c.

Beeswax-Bright yellow, guaranteed pure, 23@231/2c.

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

ST. LOUIS, August 30.

Honey-Market continues very irregular

on account of extreme heat. Comb honey is selling at 12@14c per lb. Prime extracted worth nominally 7@81/2c. With cool weath-With cool weather values will largely increase.

Beeswax--Prime yellow, 21c; dark, 20c. R. C. GREER & Co.

SAN FRANCISCO, August 27.

Honey-A sale of 50 cases of old extracted, clear, is noted at 10c, an extreme figure with wholesale buyers. Some new extracted is offering at 9c, while other lots are limited at 11c, but the latter price is beyond anything now obtainable, notwithstanding the light supply. We quote: White comb, 14@16c; dark to good, 11@13c. Extracted, choice to extra white, 9@101/2e; dark and candied, 7@ 8c.

Beeswax-We quote 23 to 25c.

ROOT & HATCH.

BOSTON, August 31.

Honey-White clover, one to comb, 20@ 22c; 2 th comb, 18@20c.

Beeswax-23@25c. CROCKER & BLAKE.

CLEVELAND, August 8.

Honey-Honey in unglassed sections is in excellent demand. 1 th sections bring 19(a) 20c; 2 th, 17@19c, but should be in nice crates with glass sides. Extracted honey not quite so ready sale at 12@121/2c in tin cans.

Beeswax-20@22c. A. C. KENDAL.

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. Wil-liamson, 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.

BEE-KEEPERS' INSTRUCTOR.

BOOKS FOR BEE-KEEPERS.

COOK'S MANUAL OF THE APIA-RY 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.

Andsomely 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.

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

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, postpaid, on receipt of price. Address

W. THOMAS & SON, Adelphi, O.



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 carofully bred. Send for circular and price-list.

7 10 CHARLES H. LAKE, 259 Greenmount Ave., "Sunny Side Apiary." Baltimore, Md.



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 CIRCULAR 8-PAGE (with cuts and illustrations) OF HIVES, ONE-PIECE SECTION BOXES, COMB FOUNDATION, SMOKERS, AND ALL SUP-PLIES NEEDEL 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 \$5 3 \$20 per day at home. Samples worth \$5 free. Address STINSON & CO., Portland, Me.

RNES' 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,

III.

1881.

Winnebago Co., -

1881.

BUY THE BEST!

The best informed bee-keepers in the U. S. say that our

DOUBLE-DRAFT QUIN-BY SMCKER

Is decidedly the BEST now made. Hetherington discards all others, and orders two dozen for his own use. Doo-little 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,



4-9

Continues to grow in popularity, and is the most practi. cal 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. Bred from Imported mothers of our own importation, for the year 1881, Tested, **\$3.00** each; also colonies and nuclei from home-bred stock. *The* No imported queens for sale. We also breed the celebrated Mocking

TALIAN QUEENS

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.

THE

Floral Instructor,

free. 6 window plants twenty five cents. Catalogue of Bulbs and plants for winter blooming FREE TO ALL.

SPALDING & MeGILL, Florists, Ainsworth, Iowa.

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

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