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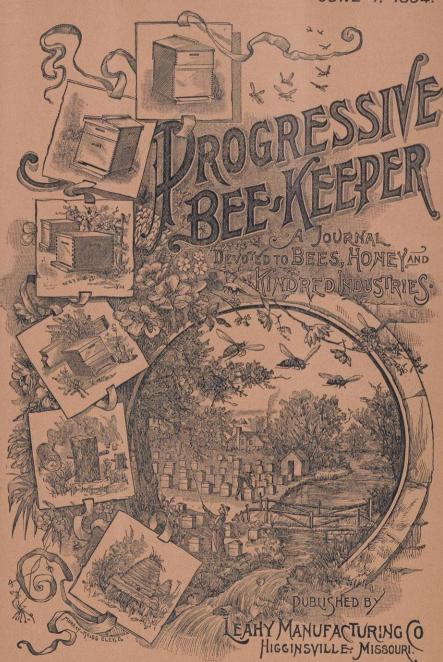
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JUNE 1, 1894.



Entered at the postoffice, Higginsville, Mo., as second class matter.

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This cut represents our Combined Circular and Scroll Saw, which is the best machine made for Bee Keepers' use in the censtruction of their Hives, Sections, Boxes, &c. Machines sent on trial. For catalogue, prices, &c. address

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WE HAVE frequent calls for a scale to weigh honey, etc., and we have now made arrangements to supply you with counter scales, with platform and tin scoop, made with steel bearings, brass beam, and nicely finished and ornamented. Will weigh correctly from one half ounce to 240 pounds.

PRICE—Boxed and delivered on cars only \$3.50; with double brass beams, \$4. Weight of above, boxed ready

to ship, about forty pounds.

These Scales can be shipped from here, and we can fill orders promptly, as we have a large stock on hand,

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My own strain of beautiful hustlers after honey. They are gentle and hardy. Four years of careful breeding and testing has shown them to be superior to nearly all others. These Queens are rearred by a perfect method, that produces queens equal to and we think, superior to natural swarming. Purity, safe arrival and satisfaction guaranteed. Directions for introducing with every shipment.

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Queens from the south. Very fine. March and April, each, \$1.00.

One Warranted	Queen.	, May to Nov. 1,			Queen,	May and June,	\$1	50
Six "	*****			One "		July to Nov. 1,	1	25
One doz. "		June,		Select "	**	each,	2	50
One doz. "	**	July to Nov. 1,	8 00	Breeding	"	each,	6	00

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Everything needed in the apiary. First quality, at bottom prices. Send for price list.

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E. F. QUIGLEY.

UNIONVILLE. MO.

S. E. MILLER.

G. H. MILLER. 1894.

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Texas Reared Golden Italian Queens

BRED FOR BUSINESS AND BEAUTY.

March, April and May, Untested, \$1.00; Tested, \$1.50. After, Untested, 75c.; Tested, \$1.00 Remit by P. O. Money Order, or Registered Letter. Price-List Free. W. H. WHITE,

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in Bee Culture a whole year; 10 strong eyes of Freeman potatoes (pure), and 10 pack-ets of flower and vegetable ets of nower and vegetable seeds, for 40 CENTS silver. This offer is made to boom our circulation.

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BRED FOR BUSINESS.

Select Tested Italian Queen, Tested Untested Italian Queen, Mar. & Apr. \$1.00 May & June after July 1

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CROSSMAN'S

Beautiful Golden

Queens

are bred from the very best fivebanded stock and guaranteed to give you satisfaction.

Untested, \$1. each; ½ doz., \$5. \$9 per dozen. Tested, \$1.50 each; Select Tested,

\$2.50 each.

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Send for Price List. W. P: CROSSMAN.

Box 141,

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Missouri AND Kansas

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WALKER, MO.

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THE PRACTICAL BEE KEEPER.

Bright, reliable, honest. PURE IN TONE

Practical from cover to cover. -PUBLISHED MONTHLY-

500 PER ANNUM. Sample copy on application.

The "Practical" and one Genuine 5-banded Golden Italian Queen for \$1.00.

PRACTICAL BEE KEEPER.

> TILBURY CENTRE. Ontario, Canada.

Please mention the "Progressive."

SUPPLIES Retail and Wholesale.

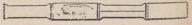
Everything used in the Apiary . Greatest variety and Largest stock in the West. New catalogue, 70 illustrated pages free to Bee Keepers.

E. KRETCHMER, RED OAK, IA.

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DO TOM ORDER YOUR SECTIONS

until you get our prices on



One-Piece Section

Dovetailed Hives, Foundation

AND OTHER SUPPLIES. We are in better shape than ever to fill orders on short notice. Write for Price-List,

J. FORNCROOK & CO.,

WATERTOWN, Jeff. Co. WIS., January 1, 1894. Please mention the "Progressive."

ALLEGAR REPORTED REPORTED AND THE PROPERTY AND THE PROPER

A New Departure.

The Bee Keepers' Quarterly

issued o April 1, 1894, and be largely devot-ed to Editorial of Review of Api-cultural Litera-

ture. It will conmanagement and devices found in Bee Journals, but many points not published of elsewhere. An EARNEST EFFORT will be of elsewhere. An EARNEST EFFORT will be o o made to eliminate the impractical theo of ries and claims so often met with in Bee of Literature, giving only Practical In-off FORMATION. which may invariably be resolved upon. There are some Bee Keepers of who are making a financial Success, even of in these hard times, and to show you how of they do it will be the "Quarterly's mission. PRICE, 25 cents per year. Send address for free sample copy to

JAMES HEDDON, Dowagiac, Mich

Please mention the "Progressive.



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1894.

"The Nebraska Bee Keeper."

A monthly journal devoted to the scientific care of bees, the rearing of queens, and the production of honey.

We have no pet hobbies to ride, and try to teach as we practice in our own apiary.

Subscription price, 50c per year. Sample copies free. STILSON & SONS,

York, Neb

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25c Send 25c and get a copy of the AMA-Pecially for beginners. Address,

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TESTED

Queens are usually sold for \$2.00. I will explain why I wish to sell a few at less than that. As most of my readers know, I requeen my apiary each spring with young

QUEENS

From the South. This is done to do away with swarming. If done early enough it is usually successful. It will be seen that the queens displacwill be seen that the queens displaced by these young queens are never more than a year old; in fact, they are fine tested Italian queens, RIGHT IN THEIR PRIME; yet in order that they may move off quickly, and thus make room for the untested queens, they will be sold for only

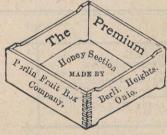
\$1.00.

Or I will send The Review for 1894, Or I will send The Review for 1834, and one of these queens for only \$1.75 For \$2.00 I will send The Review, the queen, and the book, "Advanced Bee Culture." If any prefer the young laying queens from the South, they can have them instead of the tested queens, at the same price. A discount given on large orders for untested queens. Say how many are wanted and a price will be made.

W, Z. Hutchinson, Flint, Mich. *******

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We now sell our premium No. 1 one-piece sections at \$2.50 per M; No. 2, at \$1.50. A liberal dis-count will be madeon larger orders. Dealers would do well get our fig-

ures on Sections and Wood Separators, before buying elsewhere.

Berry boxes, baskets, and crates, of the most approved styles, at the lowest rates. Send for catalogue with reduced prices. Address as in cut above.

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Promptly secured. Trade-Marks, Copyrights and Labels registered. Twenty-five years experience. We report whether patent can be secured or not, free of charge. Our fee not due until patent is allowed. 32 page Book Free, H. B. WILLSON & CO., Attorneys at Law, Opp. U. S. Pat. Office. WASHINGTON, D. C.

Bingham & Hetherington Uncapping Knife



Patented May 20, 1879.

Prices of Bingham Perfect Smokers

Bingham & Hetherington Honey

6 Doctors, 31/4 inch\$7.00	1 per mail\$1.95	2 per ma	ail, at o	ne tin	ne\$3.50
6 Conquerors, 3 inch 6.00	1 " 1.75	2 "	**	66	3,00
6 Large, 21/2 inch 4.50	1 " 1.25	2 "	**	66	2.25
6 Extra, 2 " 3.75	1 " 1.00	2 "	**	**	1 90
6 Plain,*2 " 2.40	1 "70	2 "			1.30
6 Wonders, 13/4 inch 2.50	1 "65	2 "	44	- 66	1.20
6 Knives r.50	1 "80	2 "	"	nae.	1.50

* The Plain does not have the Coiled Steel Wire Handle, neither the bent Cap for throwing the smoke at right angles. All the others have all our new improvements.

The movable bent Capenables you to change a curved shot to a straight shot instantly, and vice versa, throws smoke downward without spilling ashes, adds durability and convenience, and is cheaply replaced, if injured. Sound, dry stove wood is the best fuel for Bingham Smokers. Below is a copy of a letter from the largest producer of comb honey in the world:

Please mention the "Progressive" in answering this advertisement

Are you a subscriber for the "PROGRESSIVE
Bee Keeper"? It is but 50c per
year, and should be read by all who are interested in apicul-Leahy M'f'g. Co., Higginsville, Mo,

Honey Pails

LOW PRICES to close out that line of Manufacture. We offer this lot at following prices:

5 lbs. straight tin pails, \$4.00 per 100 " " \$6,00 " 100 21/2 fbs, at 31/2c, or \$3.50 per All orders subject to prior sale.

Horn & Co.

KEOKUK, IOWA.

Please mention the "Progressive."

Either 5 banded Golden

WWWWWWWWWWWWW

Or three banded leather colored Italian queens. Untested \$1.00 each, \$\frac{1}{2}\$ dozen 4.50; Tested \$1.50 each; Select tested \$6.25 each; Extra select tested fine prolific breeding queens, \$3.50 each. My strain of Italians cannot be excelled for business, beauty and gentleness. Safe arrival guaranteed. I will also handle a line of the will also handle a line of the Leahy M'f'g. Co's. goods, prices cheap Write for prices.

E. A. Seeley, Bloomer, Ark.

Please mention the "Progressive."

ANTED-Position in an apiary by a practical apiarist. Eleven years' experience. Address,

W. J. CULLIMAN, Quincy, Ills.

QUIGLEY'S GOLDEN QUEENS

are bred for business. Send for Circular. E. F. QUIGLEY, Unionville, Mo.

Please mention the "Progressive."

business Bingham ey are mo arrow:
am & Hetherington Honey Knife and
more effective for the purpose than in

Progressive Bee

A Journal Devoted to Bees, Honey and Kindred Industries FIFTY CENTS A YEAR.

Published Monthly by Leahy Manufacturing Company

VOL. 4.

HIGGINSVILLE, MO. JUNE 1, 1894.

No. 6

IN JUNE-TIME DAYS.

BY WILL WARD MITCHELL.

About our heads the breezes blow, Here at our feet the grasses grow,

Dame Nature smiles her fairest; The deep blue sky is smiling clear, The sparkling brooklet murmurs near: Oh, June days are, of all the year,

The sweetest and the rarest.

Dark-foliaged woods and growing grain, Smile in the summer sun again,

As in the days evanished: The ploughboy walks 'midst glowing corn, Till waning eve from sparkling morn; He cannot (who could?) be forlorn,

There where all care seems banished.

Green clover meadows deep and sweet, And fields of nearly ripened wheat,

Display their richest treasure; The birds their softest carols sing, As on some bough they rock and swing; While bees speed by with tireless wing-

No time have they for pleasure.

To coolsome depths of forest dells, Where nature's gladdest music swells,

From town and crowded city, With rod and hook the people go, Ostensibly to fish, but, oh, They seek the fresh sweet air we know,

And glades grass-decked and pretty.

So glide the June-time hours away; The things we love most shortest stay;

And so glide life's brief hours: With kindly smile and pleasant word, And noble deed the heart is stirred: Then let no note of gloom be heard,

While June still brings her flowers.

Higginsville, Mo., May 26, 1894.

NOTES FROM THE STAR APIARY.

BY S. E. MILLER.

EES are living from hand to mouth, or perhaps more properly from mouth to mouth, as it goes from the mouths of the field bees into the mouths of nurse bees: at least I presume it does as I have not watched to see. White and Alsike clover is blooming quite freely but so far seems to yield but little nectar: honey locust and grapes are also in bloom.

One colony swarmed last Sunday, but they really had no business to do so at a time when there is but little to be gathered in the way of food. They had made preparations however and would not be beaten by inclement weather or other unfavorable conditions; one queen and perhaps more had already hatched out so I suppose they thought best to hunt another home for a part of them.

How would it do in a case like the above to wait eight days as recommended by some writers, and then cut out the surplus cells to prevent after swarms? For my part I believe it would prove a failure.

We usually cut out all cells but one as soon as they have swarmed and seldom have any trouble with after swarms. After setting aside such cells as we wish to keep we shake the bees off the combs and then can see all cells that may be started. We should always be careful not to shake or jar cells that we wish to have hatch out perfect queens.

If you want a dead sure thing of it go over the hive again in eight or nine days, examine carefully the frame containing the cell if the queen has not already hatched—see that there are no cells started on this comb and then shake the bees from all the other combs and if any contains queen cells you can certainly see them without much trouble; destroy these if any are found, and you can then rest assured that that colony will cast no after swarms.

White clover had a few flowers upon May 2nd, somewhat earlier than usual.

May 2nd I found a comb in a queenless colony containing some new honey. Out of curiosity I took from another strong colony a comb to balance it, put them in the extractor and turned out nearly a pint of honey. The honey was rather dark had a strong and somewhat of a raw taste. It was placed on the table but no one seemed particularly fond of it. Judging from the way the bees were working on the sugar maple blossoms about that time it was mainly from that source: possibly some of it was from fruit bloom.

Now when I say that I extracted new honey on May 2nd, I hope those Californians will not imagine that I took sixty or seventy tons.

We should bear in mind that nearly every year there is a lack or scarcity of honey producing flora between fruit blossoms and white clover, and make some provision for the bees, as they will usually have used up all the stores in the hive before this time. A few days ago I invited ours to partake of some kill-me-quick molasses, and while some got considerably stuck on it they did not as a whole seem to take to it very voraciously; in fact, I could not start a respectable robbing match by allowing it to lie around loose. I thought it would be cheap food, but it proved too cheap to suit the bees.

In May 1st Gleanings, some of the "Big Guns" have entered into a confabulation on the eight vs. the ten frame hive. When you hear the ten frame man talk you think his head is level, and then when the eight frame man has his say you wish you had all eight frame hives instead of ten frame. Now I really don't know much about it, but as the Dutch Doctor asks what the bees say about it, I will tell what I heard our bees say; perhaps I did not hear them say it either; I might have been somnambulating and only thought I heard it. But the queen says, says she: "I wonder what that old duffer done with those two extra frames of comb. I do dislike to lay eggs in the two outside combs, and now I must either lay in them or be content with only six combs; plague take it anyhow." "Yes, yes," said the workers all speaking at once. "We wanted those two outside combs to store honey and pollen in so as to have it always handy, but the blamed old leather head has gone and taken them away: guess he thinks by that he will make us tote all of our honey up into the sections, but we will just fool him a trip; suppose we go out on the shady side of the house and fan ourselves awhile. There comes the old fool now with his puff, puff, puff, to blow smoke in our eyes. Buzz-z-z-z."

Bluffton, Mo.

A GOOD SEASON.

E. W. MOORE.

and spring and the hum of the busy bee are here again, to gladden the life of the bee keeper. I suppose all are ready for the harvest, and have begun to figure on the amount of honey they ought to get, and what to do with the money obtained from the sale of their honey. I for one have, and I think '94 will be a No. 1 honey year in Hoosierdom, as I never knew clover to look better at this time in the season than it does at present, nor bees to be in a better condition.

Why doesn't someone say a good word for the Daisy Foundation Fastener? I am using one this season, and for the one producing comb honey I consider it almost equal to any other invention. Since the introduction of the movable frame hives, no more flat covers or dovetailed hives for me. After they are in use a few years, they are warped so as to admit of bees passing in and out under them.

I think the Higginsville hive cover is what will give satisfaction on the dovetailed hive, and I intend using them on all my hives bereafter.

Twenty acres of alsike clover sowed this spring, and if all reports are true about its honey producing qualities. I will be able to have a few more pounds of honey for sale in the fall of '94 than I have in the past. Will report results, whether good or bad.

Bees wintered in No. 1 style, but the cold snap in March was death to a great many bees hereabouts, some losing as many as half they had. The loss at Cherry Grove is thirteen per cent.

The March number of the Progress-IVE is as good as the best, and chuck full of good things. Somnambulist on page 58 gives us one of the bestarticles I have read in a long time. Why can't we have his name in full? or is his name Smith or Jones, and he so modest as to be ashamed of it? Speak up, Naptown, as there are a great many bee keepers wanting to know who you may be when out of Dreamland.

Seigert, Ind.

A MISTAKE CORRECTED.

J. F. SWARTZENDKUBER.

The PROGRESSIVE for May is at hand. I notice you have put my letter to you on open-sided sections in this number as an article. Well, it doesn't sound so bad, after all, considering it was written by one who just "picked up" his English, with the exception of that terrible blunder. When I wanted to tell you that I at once saw the necessity of a different super which has end pressure as well as side pressure, I went on and said something that I don't know what. How in the world did we get that word "all" mixed in there anyhow. What a blunder! Nobody will know what is meant. [The sentence should read, "I saw the necessity of a different super which all gives end pressure at once." -Ed.] I will again try and impress on your mind that end pressure is as necessary with the open sided section as side pressure, and without it they are no success.

Great strides have been made in improving smokers in the last few years, but I am of the opinion the smokers will be laid aside by and by, and the scent of some drug, blown among the bees with some kind of an atomizer, will take its place.

Later—Since the publication of that letter in the PROGRESSIVE, I have been flooded with bee periodicals and catalogues of apiarian supplies, and the friends at Higginsville are endangered to lose a customer by the event.

Kalona, Iowa.

SWARMING OR NO SWARMING FOR HONEY.

R. C. AIKIN.

In the American Bee Journal for May 3rd are the following queries:

"Other things being equal, which will give most surplus comb honey, a colony that never thinks of swarming, or a colony that swarms, counting the crop of both mother colony and swarm?" (2.) "Which will give the most extracted?"

There are twenty-six replies, Ten answer reasonably direct in favor of the colony that does not swarm; eight favor swarming, and eight are doubtful or consider that the question hinges on conditions. Of the eight indirect answers, all or nearly all may be considered as favoring non-swarming. The gist of their thought is that if the honey flow comes early in the summer, and the swarming be in the midst of the flow, it would lessen the crop. R. L. Taylor says:

"A colony that casts a swarm early gives more surplus than one of the same strength that does not swarm."

If they swarm three or four weeks before the flow the old colony will have hatched all its brood, and will then be in the best possible condition for honey gathering attainable inside of seven or eight weeks from date of swarming if left to their natural course. As many of the young bees go with the swarm it will remain in about the same state for bees of field age for a week or ten days, but after that they will decrease till about the end of the 25th day from swarming, and often to such an extent that the colony will have scarcely more than half the bees left of the original swarm; nor will it attain its original quantity of field force till the end of seven or eight weeks.

Now if a colony swarm and be left to the natural course we find that the swarming must be done immediately before or at the opening of the flow if the new colony is to do the best work; but if the old colony is to do much, the swarm must come at about three or four weeks before the flow. The old colony will be the strongest at the end of three weeks, and will be but little changed as a working colony till the 4th or 5th week

If, however, they have a laying queen given so soon as the swarm is off, as a honey gathering colony they will increase constantly from the day the swarm issues, but cannot be in good shape for about three weeks, because so few in numbers.

Now if the honey flow be of short duration, and comes in June or July, swarming must be in April and May, if both the old and new colonies are to be in good shape to do super work. A swarm will frequently do super work for one or two weeks from time, of swarming, and then because of the loss by death and the increased demand for nurse work, desert the super unfinished. 'Tis a most aggravating condition to have the colonies neither weak nor strong, and a good flow of honey to be stored.

If a flow lasts a week or ten days only, certainly the colony that remains intact with but one brood nest to care for, can put more bees to field and super work than when divided and have to build combs for a new brood nest. overcome this very condition i. e. the weakened condition lessening the super force, and to put in the supers the force necessary to work the brood chamber. is why contraction is practiced. I admit that contraction will largely overcome the difficulty and crowd the honey to the super. If one has his hives so that they can be quickly contracted or enlarged at his option, almost any colony may be made to work supers. Years ago I worked in this way myself;

my hives were made to take sections on each side of the frames as well as on the top, and I even went so far as to arrange some for top, side and back storage. Such arrangements will get the honey in the sections, and will do it with any colony, regardless of strength, if the honey is to be had; but for many reasons which we cannot give here, with the hives, fixtures and systems of the present time, side and back storage is not a success.

It is claimed for eight frame hives that they are large enough for the average queen, which is no doubt true, and if that were the only consideration the advocates of the eight frame hive would have the best of it. I think that all, however, will agree that a decided damage is done super work when the colony is divided in the midst of the flow, whether this be done by swarming or otherwise. It stands then without question that strength of colony is the prime factor in a good colony for honey gathering, and especially for section work.

Again it is claimed that a swarmnewly swarmed-will work with greater vigor than an equal number of bees that have not swarmed. Swarming is natural, and says plainly prosperity. To prosper gives a certain vigor that those in adverse circumstances do lack, whether in the bee family or out of it. The swarm from a prosperous colony in alarge hive, is of sufficient numbers, that when once in the new quarters with not one thing to do but build comb and store honey for the first few days, do make a show. But as I have shown above, this work is done within a few days after swarming. Also as I have shown the decreasing numbers and the cell for more nurse bees in the brood nest soon makes the super work lag or cease altogether.

Now had this swarm remained in the old hive they would have all been free for super work every day, for the old

colony still has its nurse bees and the full equipment for broad chamber work, as well as the hatching forces to keep up-ves increase-the field and super workers. Admitting the fact-for I do admit it—that there is a little more energy in the new swarm, this energy is more than counterbalanced by the disadvantages caused by the division. The disadvantage is less in proportion as the flow is short and abrupt; but when the flow comes abruptly following a season of dearth, the energy or vim of the colony that has not swarmed is equal to that of a swarm. From dearth to sudden prosperity arouses any colony to their best. If this be true the non swarming colony in a sudden flow will do the best work. On the other hand a long continued flow will also give the best results when the colony remains intact, because they are in a continued and increasing honey gathering condition.

This applies to either comb or extracted honey when the surplus is taken outside of the brood nest, said nest being large enough for all brooding and winter stores purposes; but the *more* in favor of the comb honey colonies principally because *they* must build and finish comb, while the extracting colonies may be given combs to fill that do not have to be *finished*.

Now if there is a second or fall flow, of course the increase in the number of colonies means a larger crop from the late flow. If the first flow be in June and July, and the second in August and September, both the old and new colony will be in shape for work on the fall crop. The fact however does not interfere with non-swarming during the early flow. The colony that has been kept intact through the early flow can be divided as soon as the first crop is in, giving a laving queen to the new division; and each of these colonies will be an average one and make a good one for the late flow.

Yes, if you will make a small nucleus from each of the old colonies just as the first crop comes on, such nuclei will make good colonies for the fall work if not allowed to run short of stores. Through the heat of summer one-half pound of bees will care for a queen and hive full of brood almost as well as five or six pounds of bees, and such a colony will hatch their brood in time to work the fall crop. For several years I was in just such a location and know whereof I speak. My present location gives but one flow, and that comes in June and July. Our stock must make all surplus and winter stores in this time, whether they be old or new colonies. We cannot take it all in surplus and allow them to store from fall flowers for their stores; surplus and all comes together. More than that, our eight frame hives won't hold stores enough to last nine months out of the year.

No, no; I have carefully read nearly all that has been written on this subject for several years, and I am yet on the side of non-swarming in the production of comb honey. I do think, however, that ere long, we will be able to manage with small colonies that will not swarm in the production of extracted honey; but it will be by a system of contraction or its equivalent.

Loveland, Colo.

WAYSIDE FRACMENTS.

BY SOMNAMBULIST.

EES are swarming! Bees are swarming! And woe be unto him who is unprepared. Bees flow from the hives, perspiration from every pore, and, in many cases, as the physical temperature ascends, the moral temperature descends, and cuss words flow as freely as either bees or perspiration.

There ring through memory's halls snatches of well-nigh forgotten melo-

dies, a portion of one of which is peculiarly adaptable to a bee keeper's life during the swarming season: "Keep your lamps trimmed and burning." One of my greatest troubles is, lest, whilst I am closely watching the spigot, I forget the bung.

June finds us standing with anxious expectancy on the very threshold of the garnering season, all of us ready to join in the chorous, "What shall the harvest be?" Alas! at the expiration of one short month, we may be standing midst the ashes of our hopes. So let us not draw on the bank of hope too heavily, that should disappointment prove our lot, it may be the less bitter to endure.

These are the days when the farmer bee keeper arrives on the scene of action in hot haste, and wants "one of them ere patent hives," all ready for use, for his bees without a moment's warning have gone to swarming, and "the biggest swarm you ever did see is hanging in the old locust tree awaiting for me." Another class will move more cautiously, and after consuming your time, or at least hindering you for from one-half hour to one-half day, will conclude prices are too high. They have always made out the old way, and guess they can yet awhile.

My assistant says, "Talk about it taking one hour and a half to sell a woman a yard and a half of calico! Why, I've wrestled hard with a man a day and a half and finally succeeded in selling him a nickle's worth of beeswax." Not a gifted saleswoman, you say. "Nuff sed;" with the same material I court emulation and defy you to excel.

Now-a-days, too, the folks who are fond of a drive or a stroll, and are anxious to satisfy curiosity, find it convenient to drop in on you, and the number of questions they can ask would put a first class lawyer to shame. A young implement dealer inquired if the honey carriage was an extractor, while a pro-

fessor of a High school, on seeing a buzz saw, asked a similar question, all in good faith, and they were would-be's, too—would-be smart,

On some occasion when unusually rushed, and, consequently, preoccupied, I find myself answering yes or no, or quoting Dr. Miller, "I don't know," without cognizance, whereupon they seem to think they have the laugh on me, when I assure them I don't wish to be close about the matter, and am perfectly willing they shall laugh at least half of the time. I always felt that turn about was fair play.

Quite a discussion has been going on of late concerning eight or ten frame hives. This will be just about as easily determined as the number of colonies to be profitably kept in one apiary.

F. L. Thompson, of Colorado, has an exhaustive article in the American Bee Journal on the kinds of frames now in use, and closes the same with this sentence:

"It does not seem possible to combine all points in one frame."

In another article he says "bee keepers do not want the earth," and thinks it dishenest to demand more than the market price. How can bee keepers expect anything other than to be governed, like the balance of mankind, by general business principles? On what grounds could we honorably think to be considered exceptions?

May 15th Gleanings has a new plan of prevention of swarming, by Edson Hains, of Ohio, which is essentially the same as the queen restrictor method practiced by G. W. Ashworth, and others, of Missouri, and demonstrated by him at the Boonville meeting of the state convention several years since. Hains says:

"My method of preventing swarming consists in placing the entrance of the hive so as to let the bees in at the side of the combs instead of their going on to the ends of them. This enables me to put a queen excluding di-

vision board back of the first and second combs. Back of the excluding division board I place the remaining eight combs and queen. I then cover them with another piece of zinc excluder, confining the queen and brood to the eight frames. Mr. A. had a cage made of the perforated zinc large enough to hold three or more frames, which hung in the center of the brood nest, and on the enclosed combs he kept the queen."

Manum tells of his chicken water-pet which he proposes to use as a bee feeder. A tin can holding about a gallon, cone-shaped at one end, which is perforated, and inverted in a sort of basin. The beauty of it is, it is hung by means of a ring attached to the one end to a stake, and being just off the ground, the fowls cannot get dirt in the water. How about such an article being a good seller, Bro. L?

"C. J. Gravenhorst, the able editor of Deutsche Illustrierte Bienenzeitung, mentions with evident approval the cordial feeling that prevails among editors of bee journals in this country. He seems to think the writers are all on good terms, but he hasn't noticed how Taylor is going for my scalp."—Dr. Miller in Gleanings.

Is that all he has failed to notice, Doctor?

In giving a safe rule for the spreading of brood, Rambler says:

"The surest way is to make haste slowly. If the brood at any time does not fill out to one end of the frames, the reversal of one or two will do away with that evil. When the frames are filled from end to end, and have quite an amount of hatching brood, it is then safe to commence to insert empty combs between the brood."

One of his echoes reads thus:

"We remarked awhile ago that one honey producer here produced more honey than the whole state of Vermont. From the scarcity of rain up to the present writing, and the long visages borne by bee keepers, I should not be surprised if one Vermont bee keeper would produce more than the whole state of California."

"It's an ill wind that blows not any good," and perhaps this means better prices for our home products should we secure a crop. The watchman as yet proclaims, "All's well."

Many had May swarms from the locusts, and are ready for June's work. May they have plenty of it, for are not three years long enough rest? For our part, we are beginning to faintly realize the truth of "a little more sleep, a little more slumber, so doth poverty steal on like an armed man," and who has any use for armed men, unless, perchance it is girls in their teens? It seems natural for them to prefer men with at least two arms. Had I several pairs. I could find employment for all for the next few weeks, with no assistance from any of the young ladies either. In fact, I am much in the same situation as the old Pennsylvania farmer, who said he would like to see "them industrial sojers," but as he couldn't get help, he was trying to do the work of three men himself. The worst luck I wish any of you is that before the expiration of the month, you, too, may have to fall into line.

Naptown, Dreamland.

ROSE HILL NOTES.

BY OBSERVER.

INETY-TWO degrees in the shade one day. Next day snow, sleet, ice, frost. "Vat a countrie and vat a beoples." But it's rough on the bees, is it not? Yes, and on their master, too.

Everything must have a beginning, and every act a motive. Who really started this adulteration business about Heddon anyway? Like to know, you know.

In his last article (May 15th Gleanings) Heddon says a great injustice was done the party that was lately convicted and fined in Cleveland, Ohio, on the testimony of the chemist employed in the case, and intimates very plainly that if he were the party so aggrieved,

he would make the parties to the transaction smoke for it; and he is right, too. But will he in his own case *practice* what others *preach*, and forget and forgive? We hope so, for example's sake, especially we that know somewhat in regard to his stand on religious beliefs and professions.

Glad to see the fair, manly stand the PROGRESSIVE has taken in the matter from the start. "A friend in need is a friend indeed."

And now comes Mr. H's son, and makes solemn oath in regard to the honey in controversy. Good! We always believed Mr. Heddon to be too busy a man, too conscientious a man, too honorable a man, and too manly a man, to have anything to do with the dirty practice of adulteration. And now we know it. What will his enemies say now?

"Hold all innocent until proven guilty;" that is law and justice. "Down on Heddon before he has a chance;" that is prejudice and injustice. Which side would you rather be on?

"Heddon on the brain," "Too much Heddon in these notes"? Well, now, my friend, would you object to it, if you were the "under dog in the fight"? Say?

Someone in a late number of the Pro-GRESSIVE said that he believed the whole Heddon business was a "put-up job?" Looks like it now, doesn't it?

Rambler intimates that Dr. Miller might give us some HAY instead of so much STRAW. Correct.

A good many writers have been pitching into "Melbee" in regard to his selling extracted honey at 20 to 24 cents per pound. That's all right. "Melbee" is well able to take care of himself, but the question we want to ask is: Have any of those that have been "down on" "Melbee," ever bought or

ate any of his 24c honey? Personally, we would rather have for our own personal use, one pound of "Melbee's" honey than twenty pounds of the best extracted honey taken as it comes in the Chicago market. Do you want to know the secret? Well, "Melbee" mixes his honey. With what? Did you ever hear the story of the celebrated painter who when he was asked how he mixed his colors so as to produce such wonderful effects, replied, "With brains, sir." That's the way Melbee mixes his honey so as to sell at the price he does, and yet keep his customers.

J. C. Robinson has in the past used a caustic pen and rubbed many a sore spot, but M. M. Baldridge is now on his trail, has thrown down the gauntlet, and issued his "defi" in the interest of correct apicultural history. We happen to know M. M. B. quite intimately, and know him to be an extremely well posted man and a correct, reliable writer, and warn Friend J. C. R. to steer exceedingly straight, or he will strike a snag and go to the bottom.

We never did like the Higginsville Cover to the eight and ten-frame hives, as first made. It would warp in spite of fate, and bricks and stones. But with the latest improvements, it is indeed a desirable cover, a "double daisy" as it were.

Did you ever send to the "most noted breeder in the world," for one of his best, most choice, warranted, selected, double tested, never-mind-the-price queens—in fact, "A queen of high degree, of noble mien and royal ancestrie," and then lay awake o'nights devising a certain, sure, never-fail, infallible way of introducing her, and at the critical moment let her slip through your fingers and depart for parts unknown, never, no, never more to return? Say, did you? Well, if you've "been there," you can in a slight degree appreciate our present feeling. We've

been kicking ourselves all around the apiary ever since, and trying to find a hole small enough to crawl into. We feel even worse than Dr. Miller did when he let seven fine colonies starve to death. That's what's the matter with Observer.

Rose Hill.

NEBRASKA NOTES.

MRS. A. L. HALLENBECK.

DITOR HUTCHINSON of the Review, proposes to make his paper so interesting that it will be read by all members of the

family, as well as the one individual interested in bees. If one individual in the family is intensely interested in any subject, bees or otherwise, is not the whole family liable to be infected to a greater or less degree with the same interest?

Rambler speaks of Mrs. Atchley, as the only lady contributor to the Review for the year of '93. That may partly account for the fact that the Review is such a favorite with the bachelors, Rambler, Hasty, etc. If the rest of us who are not bachelors didnt want to read it too, it might be re-christened the bachelors' bee paper.

J. B. Hanks, in PROGRESSIVE for May, preaches a whole sermon in one sentence when he says: "Each blow one strikes in his own behalf helps to mould the universe." A. I. Root in "Ourselves and our Neighbors" in Gleanings for May 1st; speaks of neglected duties as opportunities lost when he says "Can it be true that, if the inmates of our jails and penitentiaries had had proper training when they were young, that they too might have been noble examples of Christian character and brilliant intellect?."

A writer in American Bee Journal, gives the novel method of disinfecting hives where foul brood has been by

painting them with coal oil and burning it off.

Fruit trees commenced to bloom here about April 26th, something I do not think has happened very often before, as they generally do not blossom till sometime in May, often not till about We had no rainy weather the 20th. during the time they were in blossom, but high winds most of the time rendering it difficult for the bees to do much work. Nevertheless they managed to get considerable honey and are still working on some kind of apple blooms in the sections and top stores of the doubled up colonies. Bees are just about one month ahead of time in building up this year and will probably be early in swarming: then if clover does well we will be all ready for it.

By close observation one learns the peculiar characters of different strains of bees and by careful study can make them do about as desired. For example, my best bees to build up early in spring are of the Alley strain, so I work them for all they are worth then. as hot weather approaches they are liable to get cross so I would just as soon put all their extra force in to help the colonies of southern strain (Mrs. Atchley and Quigley's, both being very gentle) they are at their best then to work on clover, and so on through all the season using each colony as near as possible in its peculiar season. each one has its seasons. The ones that do best at one season are not the ones that do best at some other, at least this has been my experience.

Those having several hundred colonies can not have the intimate acquaintance with individual colonies that enables the small bee-keeper to experiment with this one and that one, still the same general characteristics that enables the one to judge of the condition of colonies will hold good for the other. And it is judicious care and attention to details that ensures success and

makes the difference between well filled honey crates and empty sections. Millard, Neb.

PAINTING.

J. W. ROUSE.



HILE I fully believe in painting hives and many other things, still there are some things that I do not believe should be painted at all, but just taken as they are.

I received a friendly letter from a noted bee keeper in the far east, stating that I had "spoken highly" of the five-banded bees in the May number of the PROGRESSIVE, and he wanted to know if I was a breeder of them, and if so he would take what I had to say of them with a little salt. I wrote him that what I had said of the five-banded bees was strictly true in my experience, and he need not take that with any salt unless he liked it best that way. Now while I positively am not aim-

ing any thrust at him at all, still his words have set me in a train of thought. Why is it that we can take many of our friends who know us (I speak collectively) personally, and are perfectly willing to take our word in everything until we have something to sell, when we speak of that there seems that a certain allowance should and must be made of what we may say. I know that where one is especially interested, many are tempted and some do paint up and flower off their wares, but that is no reason why all do that way or should be so classed. If one gives me their experience, if I have confidence in the person I take it for granted they are telling the truth, for unless I have good reason to think otherwise, I judge them by myself, and have that "charity that thinketh no evil."

I saw a statement of a certain brother bee keeper with whom I am slightly acquainted, and from what I know of him, I think him truthful. In speaking of comb foundation, he expressed his belief of a great deal of painting on comb foundation, and that mostly by dealers, in saying that it took twenty pounds of honey to make one of wax, and this is done in order to push the sale of comb foundation. I know of no dealer that I think for one moment would make this statement, if not true, in order to push the sale of foundation.

I was greatly pleased to see a noted bee keeper reply to this first friend's statement, and show that tests had been made many years ago, as to how much honey it took to make one pound of wax, before foundation was ever thought of. Now I do not believe it will always take twenty pounds of honey to make one of wax, but in some instances it may, while in some other instances it may not take one-half of that amount.

I know the idea prevails with a few that dealers are the most interested in

bee keepers' associations, and attend them mostly to advertise their wares. Now I do not think that I am of a suspicious nature, but I will make this statement: In most all, if not all cases, where anyone attends a bee keepers' convention, especially if it is costing anything to attend, is from a selfish motive. I do not know whether that expresses my idea fully or not, but this is my idea: I do not believe anyone would go to a convention, especially if it cost them something, if they did not expect to be more than fully benefitted by going to the convention. I know the social features are greatly appreciated, and should be, but I think persons who go for that reason only are very scarce.

It seems to me that an experiment station is of a very great benefit to those who may learn of the experiments made, for I consider it much less expense for one man, or set of men to make experiments than to let a whole country or nation work out the experiments themselves, and so it is with most supply dealers. They test and find what is good, and then if they recommend them, why should they be looked on with suspicion? It is true that dealers sometimes have supplies to sell which they may not especially recommend or use themselves, but because there is a demand for these goods. While some would get along without using many things sold by dealers, called "traps," still there are very many who use these "traps," and think they are a great help to them. Then, different localities and circumstances have something to do many times in the use of things.

Now, friends, let us exercise a great deal of that "charity that thinketh no evil," and not be so suspicious unless we have the best of reasons for thinking otherwise.

Mexico, Mo.

THE TRAFFIC IN BEES BY THE POUND.

W. Z. HUTCHINSON.



HE traffic in bees by the pound was welco med as a boon to beeculture, but the present indications are that it "was not what it seemed." In looking over the advertisements in

the bee-journals I scarcely see "bees by the pound" offered for sale. I doubt if the traffic proved profitable to either party-especially to the buyer. difficulty is just this: The bees and brood ought not to be separated. The case is fomething like that of a man and wife, better results are secured when both work together. A colony robbed of three pounds of bees early in the season has received its death blow so far as its usefulness in honey production is concerned that year, unless it might be from a fall harvest. The bees must be sent early in the season, or the man who buys them stands no show whatever of getting any great return for his money. He must also have as many as three pounds, or there is no hope of his securing any surplus from the colony thus started. The removal of those bees from their original home was a serious check to broodrearing in that home, and the home to which they were transferred contained no brood until it was started, and even then there would be no hatching bees for three long weeks, at the end of which time the old bees will be greatly reduced in numbers. The result is that the colony thus started is not in fair shape to do good work until the early, or white, honey harvest is past and gone.

I have had no experience in selling bees by the pound, but I have had some in buying, and I think it has been more favorable than it is in the majority of cases, judging by the reports that I have seen in the journals. I one year bought 78 pounds of bees. They were in 25 boxes, so there were a trifle more than three pounds to each lot. were sent from Tennessee about the middle of May and came in fine condition. Some of the cages contained scarcely a dead bee, while in some of them the bees had built pieces of comb as large as my hand, stored some of the liquified food in the cells, and even persuaded the queen to lay in some of This I call the perfection of shipment, and I fear it is not always reached. In each box was also a queen. Twenty-five hives were prepared by filling them with empty comb, and placing a comb of brood in the center of each hive, the brood being taken from other colonies that I had. The bottom to a box was carefully removed, and then the box set upon the top of the hive over the frames, pieces of boards being placed around the box, so that all of the bees must pass down through the hive and take their first flight from the entrance. It was a short job to thus prepare them, and soon the air was filled with the roar of millions of tiny wings. I was jubilant. bought the bees at a reasonable price, I think at about forty-five cents a pound, and they had cost me, delivered, not much more than fifty-five cents a pound. Well, I cannot say that I really lost money by the operation, as the colonies were good ones when fall came, and some of them stored a little surplus honey, but not enough to meet my rosy expectations. that I had wintered, those that were quite moderate in strength, not possessing nearly so many bees as the "pound" colonies, but having their combs well-filled with brood, stored three times the sur-

plus of the best of the "pound" colonies. It is the sealed brood of May that, here in the North, furnishes the workers to gather in the white clover honey crop. and bees, even if there are three pounds of them, put into a hive in May do not have time to rear brood for the harvest that opens in June. In the instance that I have been relating, by the time that brood began to hatch, brood that was reared by the bees that were bought, the bees had dwindled away fearfully, and, had it not been for the frame of brood given each colony at the time of releasing the bees, I do not know how they would have come out.

If a man loses his bees in winter and has a lot of empty combs, it may pay him to buy bees by the pound to put upon the combs, and thus save them from destruction, but I honestly believe that it would really be more profitable to buy full colonies of bees, brood, combs, and all, and pay express upon them, than to buy bees by the pound.

Of course, all of the bees that are sold by the pound are not old bees, but a good share of them are, and they do not stand the confinement and journey very well. A few days of hard work after the journey and they are gone.

Right in this line let me say that I greatly admired the plan of shipping bees, full colonies or nuclei, that was given in the Review, about two years ago, by Mr. Nebel, of High Hill, Mo. He does what I presume a novice would think unfair. A day or two before shipping a colony, it is prepared for shipment, and then moved to a new location, a nucleus being started upon the old stand, thus utilizing the old bees. If the shipment is long, most of those old bees would be dead before the destination is reached, and to thus keep them at home is a benefit to both parties. I mention this simply to show that old bees do not bear shipment very well.

which is one reason why sending bees by the pound has not been the success that it was hoped it would be,

Flint, Mich.

WIDE FRAMES, vs. CRATES.

C. W. DAYTON.

ERHAPS the greatest fault of the wide frame is the sagging of the bottom bar because of the weight of the honey upon it. Honey in wide frames is not sustained by attachment to the top bar as in extracting combs, but the sections are loose so that the whole weight which is greater than the weight of brood or extracting combs rests upon the bottom bar. It was possible to use a tin or wood support in brood or extracting frames, but, in a wide frame of sections there was no room for it:where the support was most needed it was impossible to use it. The brood frames are 91 inches deep outside in order to leave the } bee-space around them when hanging in the hive. Because two standard sections are 81 inches deep this measurement must necessarily take off an eight of an inch more from the thickness of the top or bottom bar of a wide frame than from a brood frame of & material. Then again, there must be allowed a small amount of play in the wide frames around the sections or they could not go in. these reasons wide frame material has been not more than 1 inch thick. sag of the thin material gave the bees a chance to plug in propolis so that not only the sections became solid and required scraping but the wide frames needed cleaning before they were fit to use again.

One fault of supers or section holders is that the whole tops or bottoms or both of the clean wood of the sections is exposed to the travel of the bees and their attachment of burr combs. Then,

in scraping, besides the labor, it takes great care to avoid uncapping a cell now and then. One cell is not much but the nearer perfection the combs are the plainer the flaw shows up. The nearer perfect the combs the more need to have the wood clean and smooth. When the bees leave a cell uncapped it is safe, but a cell opened by a knife drips and the honey not only soils the other sections but usually gets out of the case to attract flies and dust. perfect working wide frame protects every outside surface of the section so that no scraping is necessary. If the surfaces do not approach closely enough to exclude heaps of glue and wax, and stay so, why, it is good reason for their abandonment for something better. The best use of wide frames is not to accommodate but to protect sections while in the hives. Crates accommodate but do not protect. The sun shining in at a window on a crate of "white" sections is an injury. Fancy products go to those who eat what they can buy and who buy what they can see, without questions, to whom the scars of propolis and burr combs are no better indication than of the dirty shop in which they may have been manufactured. small line of glue in the honey harvest is largely white wax and an object of admiration, but the scars which remain after removal of much glue are the reverse. Much glue and wax on sections will interfere with packing in shipping cases; a small amount is no hinderence to their going in and helps to hold them steady when shifted about.

The bees will carry honey above more readily without than with a honey board. Also more readily with \$\frac{s}{2}\$ top bars than with \$\frac{1}{2}\$ inch top bars to the brood frames. These cannot be tested to ascertain to a certainty. One bee keeper might make one appear as the best and another the other and this through faulty construction or mis-

management of the less successful fix-

But the philosophy is the same. A high chimney increases draft but the opposite is the fact in the storage of honey for from or near by the brood combs.

One reason crates and supers gained prestige was because of the difficulties encountered by the improper use of Being mainly used in wide frames. the lower story and carrying two rows of sections the upper row was filled tolerably well while the lower row was a poor job, if the queen did not invade them with brood. It requires more storage room than is convenient or practicable at the side and when crates were placed on the top of the hive the wide frames were shut in the brood chamber away from examination, so that after being filled they were spoiled by bee travel.

Another advantage for the crates. The spacious covers, as earliest used, for winter packing and protecting the "boxes" were already on hand. "Tiering up" was an unheard of operation, a cap full of two-pound boxes being quite enough for the strongest colonies.

In the Harbison hive, (so called) which held sway so long here in California, the brood combs were about one foot square, the sole object of invention being brood rearing with room for winter stores above. Yet, this hive came extensively and unquestionedly into use for the production of comb honey while its inventor and all who used it freely admit that the Langstroth shape of frame was far ahead. bison, like Barnum in the show business, was leader and his large amount of capital invested in it was too great to advise a change. Not only in honey but in the sale of colonies and hives a loss would have been materially felt.

The question comes to mind as to which should receive the most attention, methods and fixtures to obtain

honey or the same to promote brood rearing. It would have been no hindrance to the propagation of brood if the L frame had been & inch longer, but the advantage gained for the wide frame would have been great by the possibility of a divisional upright bar. But, even then, under the weight of 8 full sections there would have been sag in both top and bottom bars of the frame and the only way out to "dry land" is to cut from the disproportionate length of the frames and hive 41 inches. Then adopt & of an inch, the true unit of measurement, for bee spaces and thickness of frame material, and the 41x41 standard section, the true merit of measurment for hives and our hives will come out 91x131 inches outside measure. Put in 10 brood frames and make the width of the hive equal to the other dimension and it is 141 inches square inside. Thus we have economy itself and the force in its most compact form. Force, like heat from a stove, rises, right up into the surplus apartments where we can control and utilize it but it is a bad predicament to be in, to want the force and not be able to get it.

Ten combs in a hive means eight containing brood. Eight combs in six with brood in, and in case of a 17 inch frame, a little patch in the center and a space for waste of force on both ends.

This sized wide frame, constructed of \$\frac{1}{8}\$ material will sustain six full sections with the least sag, and a set of seven half-depth wide frames with following board and wedges is the most convenient to handle and produce the straightest combs and cleanest sections in the shortest space of time of any arrangement which I have seen.

When full depth upper stories are used to obtain extracted honey too much room is given and too much removed at once. When the upper part is all sealed and ready for removal the lower part is still being worked upon

and contains the bulk of the bees. With the half depth stories, (which is the same as for sections) the finished part may be removed with escapes without interruption of work upon the lower half. Escapes will work better because of less bees to go through them and less inclination of the bees to stay with sealed than unsealed combs.

In doing without excluders one precaution is necessary, namely: Where ten combs are used in the brood chamber use eight above, in which case the extractor combs after uncapping will still remain too thick for brood. When nine combs are above uncapping makes them exactly right for brood, and seven above are liable to have intervening combs built between: they are clumsy and too thick for most extractors. The use of escapes allows more time to watch the progress of work in the hives. If a queen gets above before the combs have been built out thick, she may be shaken out before the entrance and she will rarely go above the second time.

Florence, Cal.

SOME MISTAKES CORRECTED.

THOMAS G. NEWMAN

INCE the publication in Gleanings and the American Bee Journal of Mr. Heddon's reply about adulteration, some misunderstanding has resulted. As the misconception concerns myself and the National Bee-Keepers' Union (of which I am General Manager), I desire to put the matters in question in their proper light, as well as to correct some mistakes.

In the former matter Mr. Heddon's statement was as follows:

"When at the World's Fair last fall I called on Thos. G. Newman, Manager of the Bee-Keepers' Union. While there he showed me two bottles of honey said to be adulterated, and taken from one of my cans.............These two samples never came from any apiary, and I afterwards gained some evidence that they were sent to Manager Newman by W. D. Soper, of Jackson, Mich." etc,

Some readers received the impression that I gave him the information—not noticing the words: "I afterwards gained some evidence that they were sent," etc.

As I have had no correspondence of any kind with Mr. Soper for several years, and received no honey (either pure or adulterated) from him at any time, I could not have given Mr. Heddon any such impression. I therefore wrote to him inquiring if he intended such an interpretation. He replied thus:

"No, sir. I haven't said a word about you in connection with Mr. Soper! Not a word! Read again what I did say in Gleanings," etc."I received my impression that W. D. Soher sent you the samples from an anonymous letter from the eastern part of this State, mailed on a railroad train, and printed with red ink. I never could get the least idea who sent it."

This indisputably settles that matter, and I will pass to the next point. The American Bee Journal, on page 520, copied from the Review these words:

"Take the case of Mr. Heddon for instance. The Union did not consider that there was sufficient evidence to convict," etc.

The editor of the American Bee Journal commented on this statement thus:

"As to the Union not considering the evidence sufficient to convict, we may say that was when the Union had only Prof. Wiley's analysis a year or so ago. Since then we believe the Union has not taken cognizance of the evidence obtained in the last few months—the analysis of 'Willard's honey,' for instance. It would seem that the case is a great deal stronger now than it was a year ago."

With due deference, I must say that I cannot see wherein the case is stronger now than it was a year ago. Certainly the analysis of the "Willard honey" is no more reliable than that made by the United States chemist, Prof. Wiley, who stands at the head of

the profession! To show that it is in reality weaker, I have only to state that the same chemist analyzed the "Jankovsky honey" and pronounced it adulterated with sugar, when another equally good chemist made an analysis of the same honey and pronounced it pure! This is but confusion worse confounded! To rely upon such evidence in court, to convict, would be extremely hazardous!

As General Manager of the Union I placed all the facts before the Advisory Board, asking for instructions how to proceed in the case and received replies from every member. Nearly every one cautioned me not to undertake to prosecute the case unless I felt reasonably sure that the evidence was sufficient to convict.

This correspondence was then submitted to the President, and his advice Without betraving any requested. between the executive confidence officers, I think I may say that the legal advice given by President Taylor was sound; I fully concurred in his recommendation, and carried it out. It is in my possession in writing (as well as the correspondence with the Advisory Board), and if necessary to defend the Union, consent can no doubt be obtained to publish it. As these are private consultations between executive officers, the communications must so remain unless permission is given for publicity. Until then the General Manager will shoulder all the blame which unwise enthusiasts may wish to load on the Union for non-action in the matter.

Since then no application has been made to the Union to prosecute Mr. Heddon—except that he has himself very strongly urged the Union to prosecute him in order to prove his innocence—a thing not contemplated by the constitution, and one which would in all probability not be sanctioned by its members. At least, before such an

innovation is made, I think every member should have an opportunity to express his or her epinion by vote.

It matters not how sure some may feel that the evidence was sufficient, even though circumstantial. The law takes a cold view of the matter, and demands absolute proof. It is not a question of guilt or innocence with the Union, but merely the sufficiency of the evidence to convict.

Had the accused, or his employes or confederates, been seen in the act of sophistication—had the adulterating material been found on his premises, or anywhere in his possession—had the product been obtained and sealed up on his premises, and remained intact until produced in court and submitted to experts—then it would have been different. But all these links in evidence were lacking!

The product relied upon for proof had been shipped unsealed, and it was possible that it might have been tampered with in transit, in the warehouse where stored, or on the way in its second shipment, etc. Unquestionably it was a "villainous compound."

As the accused, when shown the samples, positively stated after sampling them: "These samples never came from my apiary"—would not such a statement in court stand, in the absence of positive testimony to the contrary? Would not the Union have lost its case—squandered its money—injured its reputation, and damaged the industry if it had espoused such a weak case?

With positive proof in its possession, the union would have prosecuted the case to the full end of the law, for no condemnation is to strong for a sophisticator of that God-given sweet—honey! No living being has any more right to adulterate than he has to counterfeit "the coin of the realm." All the Union needs is positive evidence to convict.

Chicago, Ill.

CETTING BEES IN SHAPE FOR THE HARVEST.

JOHN N. PATTERSON.

HERE is probably no other one thing in bee keeping that perplexes the apiarist more than to get his bees in shape for the market, and even after he has gotten them in the desired shape, what one is it that has not had his frantic visions more or less dispersed by promiscuous swarming right in the height of the honey flow?

While I think swarming cannot, or at least should not, be entirely prevented, it can be controlled to such an extent that better results can be obtained as regards honey production, than if they had not been allowed to swarm. Every colony should swarm once, but no more, during the season, and if you do not get that colony to swarm at least eight or ten days before the main honey flow begins, that colony should be divided, providing it is strong enough in bees and brood. But if it is not strong enough to swarm, and will be likely to swarm before the flow is over, make one swarm from every two hives by shaking the bees of two such colonies in front of a new hive placed on the stand of one of the old colonies, giving them the queen of best colony thus divided, and take one of the old hives, fill out to completement with combs filled solid with brood selected from the two hives, and thus you have two colonies ready to work in the section when the flow begins. Although some such colonies will not swarm during the season, it is usually best to make sure that they will not, by dividing them as described above.

Now we will take a colony of bees about the first of June. If that colony has built up properly, it should be ready to cast a swarm. Some colonies will be ready to cast a swarm before

this time, but I would try and prevent them from doing so if possible. It usually can be done by setting the hive on a super or two, if it is the loose bottom kind. If not, give them a super on top and insert frames of empty combs at intervals of about a week, and giving the frames removed to weak colonies, or use them for starting nuclei. You can manage them this way until the first of June, when you remove the supers and contract the hive to its ordinary capacity, and do everything to encourage swarming in the next ten or twelve days.

Again, there will be colonies that are strong enough to swarm, but for some reason do not. Such should be divided about ten or twelve days before the flow opens Set a new hive on the stand formerly occupied by the old colony, and shake all the bees in front of it. These, with the field bees and the old queen, will make a colony that will work in the sections as well as a natural swarm. Hive the colonies that swarm naturally on frames of foundation, or, if you have them, clean worker combs. Then give the old colonies that have swarmed naturally, or been divided, a young virgin queen, or a cell that you know will hatch inside of twenty-four hours. The idea of this is to prevent second swarming, as the young queen will destroy, as a rule, all queen cells, and thus stop all second swarms. Although it might not come amiss to look into the hive on the second day after you gave them the cells or queen, to see if the cells are all torn down, which they generally will be, but should they not be, you can tear them down yourself.

The idea of having the swarming all done up from eight to twelve days before the flow is this: If they should swarm much before this, the young colony may swarm before the season is over. Again, if they swarm early, they do not seem to work in the sec-

tions with the energy of a younger swarm, possibly because they have the brood chamber full of brood, and as they die off rapidly at this time, there are not so many bees to work in the fields, besides requiring a large part of their earnings and force to attend to the brood—thus the reason why the early swarms do not make as good headway in the sections as younger swarms, in my estimation.

Another reason for having the swarming done up about this time is that the colony that east the swarm would not, if they had swarmed later, have been ready for the sections so soon, and thus would have lost a large part of the flow by not being strong enough in bees to work to advantage in the sections, and not being old enough to make good field bees.

England, Pa.

WORK AT MICHICAN'S EXPERI-MENTAL APIARY.

R. L. TAYLOR, APIARIST.

OUTLINE OF WORK FOR THE COMING YEAR.

"Perhaps he hath great projects in his mind, Or revels in the joys of calculation."—Byron. INCE it has been definitely set-

tled that the apicultural work in connection with the Michigan Experiment Station is to be continued for another year, it will be profitable to begin the consideration of plans to be used in conducting the work. So far as the work already completed is concerned an effort has been made to secure its more general publication by the early issue of a bulletin which it is expected will be ready for distribution by the time this meets the eye of the reader, and it can be obtained by simply asking for it on a postal card directed to the Secretary of the State Board of Agriculture, Agricultural College, Michigan.

There are some items of uncompleted work relating principally to the wintering problem which will appear as soon as the results can be definitely known. Owing to a long continued illness during late fall and the beginning of winter they are neither so extended nor so important as I had intended, but there will be an earnest effort to make effectual preparation for useful experiments in this line next winter.

I have been making use of a hygrometer to determine the degree of moisture in my cellar and its readings have been so much of a conundrum that I have sometimes been in doubt as to whether I have as yet succeeded in securing its perfect operation, but I hope by further study to make it worthy of confidence.

What shall the work be for the coming season? I shall here give something of an outline of what I propose, which is, of course, subject to change by authority of the State Board of Agriculture, by the advice of the Committee of the State Be-Keepers' Association, or on account of reasons that may come to light through communications from those interested in discovering improved methods in apiculture or otherwise.

The first thing contemplated in order of time is an experiment to test the advantage of spring packing. As soon as the bees are out of the cellar and have quieted down so that their strength and condition can be intelligently estimated, two sets of colonies will be selected with all possible care so that when all points as to their condition are considered it cannot be safely said that one set is better than the other, then both sets are to be treated alike except that one is to be thoroughly packed and to remain so until settled summer weather and the other left without any protection but the single-wall hive. If there prove to be marked advantages in packing it will be shown, at the time when the packing is removed, by the greater strength of the colonies both in bees and brood; but the crucial test will be in the cash value of the increase and

surplus of all of which an accurate account is to be kept.

Then the matter of feeding during the spring for the purpose of stimulating the production of brood is one upon which there is not a full agreement on the part of the most experienced beckeepers, and is of sufficient importance to call for as thorough a test as it is possible to make. To do this the same care is to be taken in the selections of two sets of colonies as in the preceding matter, and, as in that, a careful record of all the results will furnish a criterion that will perhaps enable us to say whether such feeding has any decided advantage.

In connection with these two proposed experiments, if the season is such as to cause considerable swarming, an effort will be made to obtain some light upon the mooted question of the advantage or disadvantage of swarming, i. e., whether a colony which casts a swarm will produce results of greater or less value than it would have done had it passed the season without contracting the swarming fever. I say in connection with the other experiments, because thus the labor of selecting colonies of equal strength can be made to serve both purposes,

Dr. Miller writes me suggesting that

I make an experiment to test the comparative advantage of ten frame hives and eight frame hives. Would a two story Heddon hive take the place of a ten frame hive satisfactorily? They are of the same capacity. Such an experiment seems to me a most thankless task for if there is anything I know about the production of comb honey, it is that an eight frame hive in this latitude is better for the purpose than a ten frame hive, for, as a rule, in the former there will be produced as much. or a little more, profitable brood, less unprofitable brood and eight or ten pounds more section honey, which, in the latter, would go into the brood chamber, while twenty-five per cent. more bees will lounge or labor in the brood chamber of the latter instead of attending to the more profitable bus-iness in the supers. This is not all, but it seems to me to be enough. To me, the results of an experiment conducted on any plan which has yet suggested itself to me, would be less satisfactory than is what I already know by

direct action of my senses. However,

if the Doctor can suggest some feasible

plan for making an experiment at nct too great an expense, the results of which, if rightly conducted, he will guarantee to produce in his mind a settled conviction to which he agrees always to cling, I would gladly agree to make it.

Another point which I think deserves attention is the question so often discussed as to whether a made swarm does as effective work as a natural one. With proper care this is a matter of which I think a very satisfactory solution may be obtained. The made swarms should be taken from colonies which have not contracted the swarming fever and which have queens equal in qualities, as near as may be, with those which the natural swarms possess. A careful record should be kept of the weight of such swarm of either kind as well as of the time of hiving, and they should be put into hives alike in all material respects, at the same time, or if not all at the same time, at least in pairs, one of each sort, so that the aggregate time of honey gathering of each set shall be just equal. The results should then be taken as a pretty accurate indication of the advantage or disadvantage of either course.

Of course, all the experiments of last season should be repeated with such changes of method as experience may

intimate will be of advantage.

The non-swarming attachment with any additional improvements can tested from the very beginning of the honey season before the inception of

any desire to swarm.

The hiver also should be given the fullest chance possible consistent with fairness to redeem itself, but in the case of each of these devices the best effort possible should be made to compare the actual value of results with that of the results of the same number of other

colonies of equal strength.

In the case of the comparison of the value of starters, foundation and comb in the brood chamber, the same general course should be followed as last year, but more should be made of the results in the brood chamber in the matter of brood and comb building. Perhaps also something more satisfactory may be obtained by a course something like this: Take three swarms and put them together in a large basket, caging the queens, and place the basket in a darkened cellar, then after the swarms have become thoroughly united, divide them again into three

equal parts, giving each a queen, and hive each one in one of a set of the differently prepared Though the three swarms before being united may have been of different values as workers, the thorough amalgamation and the equal division would presumably make them of just the same

The subject of foul brood will continue to receive such attention as circumstances will permit. An experiment which I had expected to make last year, but failed to carry out from the circumstances of the season, will be attempted during the coming summer. I refer to the testing of wax from foul broody combs as to its ability to convey the disease to a colony hived upon foundation made from it, without its ever having been brought to a boiling tem-The wax was rendered in a perature. solar extractor at a temperature never exceeding 180 degrees F., and it will be sheeted and made into foundation without permitting its temperature at any time to go above that point. This foundation will then be used in frames and swarms hived upon it and results care-

fully noted.

The testing of different sorts of section foundation will again be made a prominent feature of the work this year and on a more extended scale. in some parts of the work no important change of method is necessary, in others an entire change must be made. For instance, in testing foundations for the purpose of determining what sort the bees prefer as shown by their drawing it out quicker and farther, only two kinds, I think, should be used together alternately, instead of a large number as last year. Then the sections used for this purpose should be much narrower so that the bees will not be tempted to leave one sample on account of the unusual depth which its cells have reached to bring up another having shallow cells. Comparisons also will be attempted of foundations made the same lot of sheeted wax, but upon different machines, as well as of different weights of the same make.

These are the chief features proposed for the summer's work so far as my plans are yet matured, and my hope is that this statement of my plans may lead bee keepers to make suggestions that will enable me to further improve and extend my operations. - Bee Keep-

ers' Review.

Lapeer, Mich.

OUR LETTER BOX.

A Helping Hand.

J. T. HIGGINS.

WELLE I was thinking that North west Missouri was needing a bee paper, I received a copy of the Progressive. I read the American Bee Journal for '93 and saw very little in it from Missouri, and when I did see an item from our State, always read it with interest. Now if the bee keepers of Missouri will try, they can make the Progressive a good paper, and one of great interest to all concerned. There is nothing that I like better than to read the reports from all the bee keepers, especially in our own locality.

The bees have generally wintered well in this locality; the winter being open gave the bees on the summer stands frequent flights, I think the suggestion of J. C. Stewart to have the convention of 1894 at St. Joseph at the time of the annual fair a good one and we look forward to the meeting with

interest and pleasure.

Friends, lets use our energy to make the Progressive all that we could desire. Mr. Editor, put me down for two years.

Bethany, Mo.

Yes, friends, we will appreciate your assistance. Anyone wishing to subscribe for the Progressive for two years, the price will be eighty cents.—Ed.

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A Reply to Mr. Dibbern, - The Other Side of the Question.

J. J. YODER.

In the April Progressive, page 104, Mr. Dibbern says he would like, as I understand, that the Progressive would defer inserting questions for the benefit of the beginners. I do not think it is very friendlike or brotherly. It seems to me he begrudges the oppportunity, which he had to have at one time himself. How does the shoe fit, Mr. Dibbern? Furthermore all beginners are not able to buy all the necessary appliances required in an apiary and would you not say keep up with the times? If so, then we beginners should read and learn all the news we can.

Besides all this, you are advertising bee keepers' supplies for sale. Now, if I would talk like you, I would say, why don't you keep such trash out of the journals that are printed for the benefit of beginners? Why don't you, with some more such, if there are any, join together, and have your printing establishment? Is not such talk ridiculous in the sight of common sense?

Chesterville, Ills,

A Good Word for Heddon,

H. C. FINNEY.

Don't you think you could combine the making of berry boxes and crates with your business at a profit? I should think your wood separator machine could be adjusted so that it would cut the box and bottom. I want to say right here that your foundation is very nice; the bees work it so readily. Your improved top bar (Hoffman) I think is an improvement in the right direction.

Thank you for the kind words spoken for Bro. Heddon in the last PROGRES-SIVE. Some would do well to read again that passage of scripture, "Let him that is without sin east the first stone." There are other adulterations

than honey.

Council Grove, Kas.

Friend F:—We have had many inquiries for fruit boxes, but the trouble is we can't get suitable timber here cheap enough to compete with those more favorably located. We may handle them next year; if so we will buy a car load and sell them as cheap as we can afford to. I thank you for your en couragement to do right.—Ed.

The Progressive Bee Keeper.

PUBLISHED MONTHLY BY LEAHY MANUFAGRURING COMPANY

R. B. LEAHY, E. F. QUIGLEY, Editors.

Terms—50 cents a year in advance. Two copies, 80 cents; 5, \$1.75; 10, 3.00.

HIGGINSVILLE, MO., JUNE 1, 1894.

Weather dry, and no honey coming in yet.

Friend Givens, of Lisbon, Texas, reports the arrival of a big new boy at

his house. We offer our congratulations, and we hope the new heir will make as good a bee keeper as his father.

We notice that the W. T. Falconer Manufacturing Company have employed E. A. Weed, of Cincinati, Ohio, to superintend the manufacture of their foundation. Mr. Weed has a method by which he sheets the wax without melting, and other methods by which he makes very fine foundation. We congratulate the Falconer Company in getting control of this process with Mr. Weed to manage it,

A subscriber writes from Little Britton, Ontario, that he has 250 colonies packed in clamps, of four and eight colonies in a clamp, packed all the year round with five inches of sawdust on the sides and six inches on top. He got 6c for alsike honey and 4½c for buckwheat honey. He gets honey from willow, dandelions, black locust, rock maple, alsike and white clover, basswood and thistle. Maple sugar making came the first of March this year. It usually comes the 21st. The sugar sells for 8c per pound.

On page 160, is an article from W. Z. Hutchinson on the "Traffic in Bees by the pound." Bro. Hutchinson thinks that while it sometimes pays to buy bees by the pound, in most cases it is unprofitable both to the seller and the buyer. This we have always believed to be so, and have never offered bees by the pound, and when having inquiries for them, we have cited the parties to someone who advertised bees that way. Bro. Hutchinson expresses it thusly: To rob the bees of their brood, or to rob the broad of sufficient bees to protect it, is like separating a man from his wife. We would as soon cut off the heat from an incubator full of half hatched eggs, or pull a setting hen off a nest of hatching eggs, as to sell a

pound of bees, that are needed in the spring of the year to protect and care for the brood. We believe that when a portion of the bees are sold, the same portion of brood should accompany them and we think it was Oliver Foster that gave away a piece of comb containing brood with every pound of bees sold, although he advertised bees by the pound, he believed that the brood and bees should not be separated.

In the May number of the PROGRESS-IVE we accused the editors of Gleanings with not treating Mr. Heddon fair, and advanced argument, the purport of which is this: That if the Roots could use twenty columns of their journal to boom their supply business, four columns to describe an elevator for which bee keepers have no use, and two more columns to describe how Mr. Root, Sr., bounced a book agent, we thought that room should also be given to a brother bee keeper, whom they had virtually accused of adulteration of honey. did not suppose the Roots would like the course we have taken in this matter. (Every man is your friend until you step on his toes, and we believe our big boot has come in contact with some of Uncle Amos' corns, for he talks back and tells us that they only used eighteen columns, in place of twenty, to boom their business, and that Gleanings is a great big journal, while the PRO-GRESSIVE used seven columns for the same purpose, and it is a much smaller journal). This is not to the point, but simply dodges the question. The question was whether a publication has the moral right to accuse, and poison the public mind against someone whom they do not like, and then, in place of giving the accused room to reply in his own words, say: "We must say that we have no more room for further discussion of this matter."-(Gleanings page 335.) [The Italics are ours]. This the point, and the smallness of our journal was not a matter of consideration. We notice, however, that the Roots have changed their minds since ourselves and others have taken the stand that they have for "right and justice."

A Carniolan queen mated to a black drone, produces the meanest bees to handle we ever saw. They will continue to follow you long after the hive has been closed up.

In requeening an apiary, select only queens that remain quiet on the combs. A queen that runs off the comb when ever a hive is opened generally produces bees that are hard to handle and very cross.

Progressive Apiary has secured a lot of surplus honey in brood combs from fruit blossom this spring; we shall use it to build up and increase our apiary. We desire to stock two good out apiaries this season.

We have just received a copy of the "Second Annual Report of the Illinois State Bee Keepers' Association." It contains 260 pages, cloth bound. The association has \$500 annually donated from the state for printing their report.

Don't order supplies by express, and then write to the dealer after you get them, blaming him for not using his judgement as to the cheapest way of shipping. All dealers want to save their customers heavy charges, but how are they to know unless you tell them in your order to use their own judgement as to the cheapest way to ship.

We are still able to fill all orders for queens promptly at the following prices:

These queens are five-banded, bred for beauty and business. Don't you need some of them? If so, write for prices on large quantities.

The editor of the Review says in an order sent us for queens: "Mark the cages so I will know who they are from." Bro. H. must have been caught like another customer of ours, who ordered an untested queen from us for a neighbor

and a select queen from another breeder for himself. He received the select queen first, and there being no address of the shipper on the cage, he supposed it was the one ordered for his neighbor. The arrival of our cage showed him his mistake. Breeders who cannot afford to pay \$1.50 for 1,000 printed covers for their cages, can get rubber stamps very cheap. They are better than no address.

SPECIAL NOTICE.

We have the following goods for which we will take less than cost:

One Six-Inch Foundation Mill, Root's make, (new). This is just right for making thin foundation: Cost \$13.50; will take \$8.50. A bargain.

100 Simplicity hives.—These have Hoffman frames, and are packed five in a crate. Will sell at the following prices: No. 1, 85c each; No. 1E, 65c each; No. 2, \$1.10 each, and No. 2E, 90c each. These hives are ten-frame hives, and as the ten-frame hive is becoming so popular, they will go like hot cakes.

1300 No. 2 Sections, $4\frac{1}{2}x4\frac{1}{2}x7$ to foot, We will take \$1.25 for the job lot.



Five 2-frame Novice Honey Extractor, for L frame, as shown in accompanying cut, \$5.50 each; two for \$10.50.

TESTIMONIALS.

Leahy M'f'g. Co.,—The hive covers came promptly; are all nailed and painted and are perfect beauties. The man who thought of that cover first must have smiled at the completeness and simplicity of it.

JOHN BLACK, Pattonsburg, Mo.

Leahy M'f'g. Co.—The PROGRESSIVE is a welcome visitor every month. I like to read it very much. Hope you will be successful. Long may it live.

J. A. SCOTTEN, Belvedere, Mo,

Leahy M'f'g. Co.—Enclosed find \$6, for which please send me another dozen of those daisy queens by return mail. Pop them through, as they go like hot cakes.

J. R. BARNHARD & Co., Ottawa, Kas.

Leahy M'f'g. Co.—My goods came to hand in due time, and I am well pleased. They are the best of workmanship, the best quality, and very accurately made. Your Higginsville hive cover, as improved, is a dandy.

J. F. SWARTZENDRUBER, Kalona, Io.

Leahy M'f'g. Co.—The twelve untested queens I got of you last year were all purely mated, and were a fine lot. I would like to have twelve more of them, but times are so hard I will have to wait awhile.

MRS. E. L. HAMILTON, Sedalia, Mo.

Leahy M'f'g. Co.—Queens received O. K., and introduced successfully. All goods I have received of you are just first class, sure.

B. F. BROWN, Wister, I. T.

Leahy M'f'g. Co.—The foundation ordered from you came all O. K., and I am well pleased. Will order some more soon. Success to you.

T. B. Jones, Bradstown, Ark.

Leahy M'f'g. Co.-I think the new Higginsville cover just the thing.
O. H. HYATT, Shenandoah, Iowa.

Leahy M'f'g. Co.—The goods I ordered came to hand about two weeks ago. There was good stock in the entire lot. The friend who got the hives is well pleased.

H. W. RIDER, Springfield, Iowa.

The PROGRESSIVE BEE KEEPER, published by the Leahy M'f'g. Co., of Higginsville, Mo., is all its name implies. It is a menthly journal, devoted

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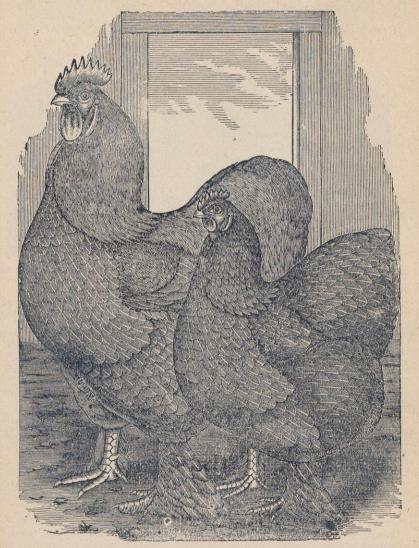


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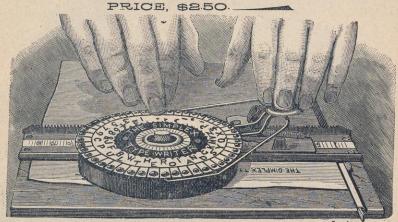
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