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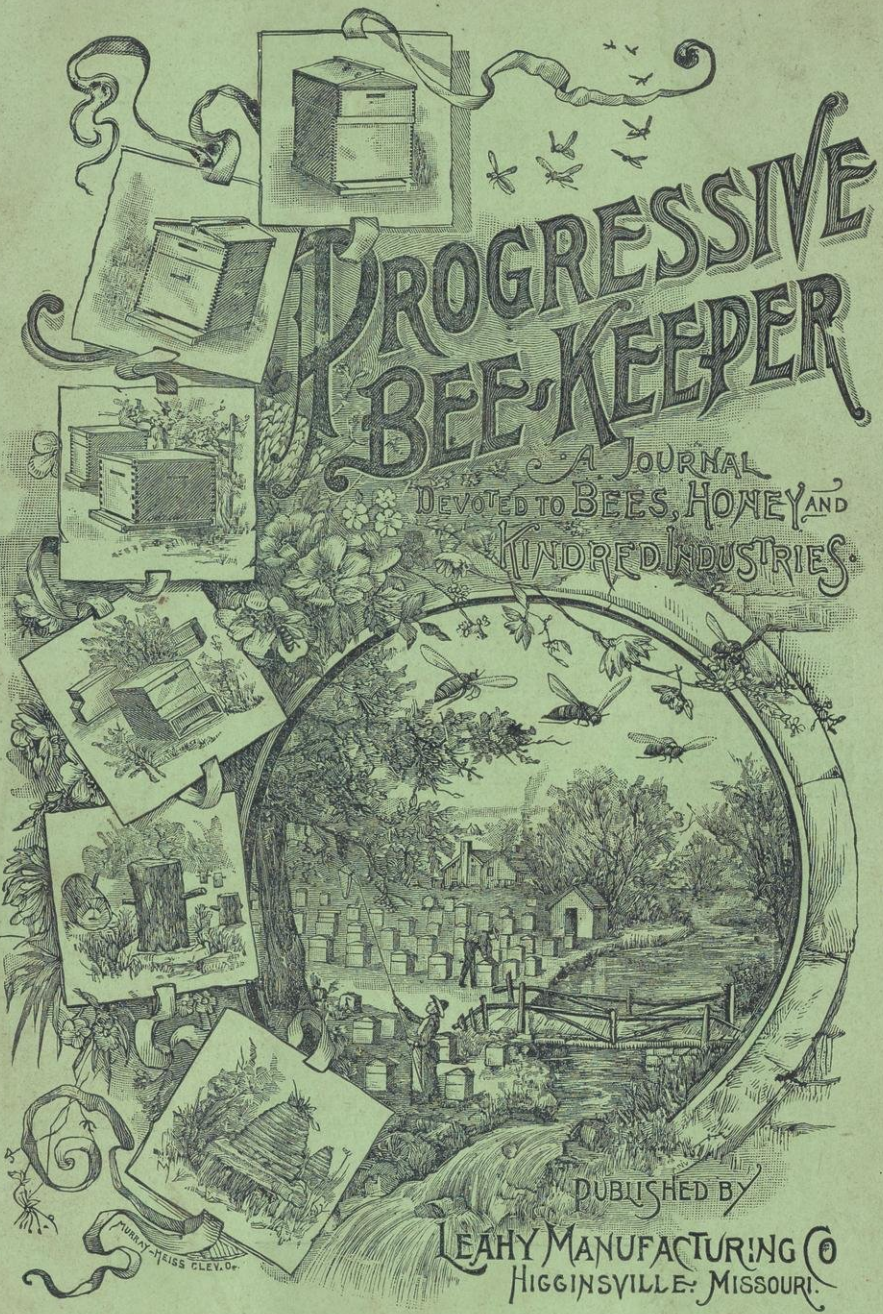
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JANUARY 1, 1897.

PROGRESSIVE BEE-KEEPER

A JOURNAL
DEVOTED TO BEES, HONEY AND
KINDRED INDUSTRIES.



PUBLISHED BY

LEAHY MANUFACTURING CO
HIGGINSVILLE, MISSOURI.

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

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- A Year Among the Bees**,—by Dr. Miller; price, 50c.
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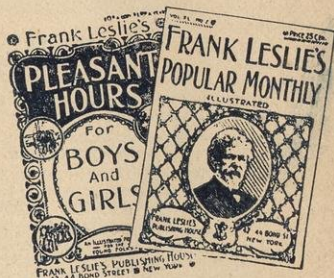
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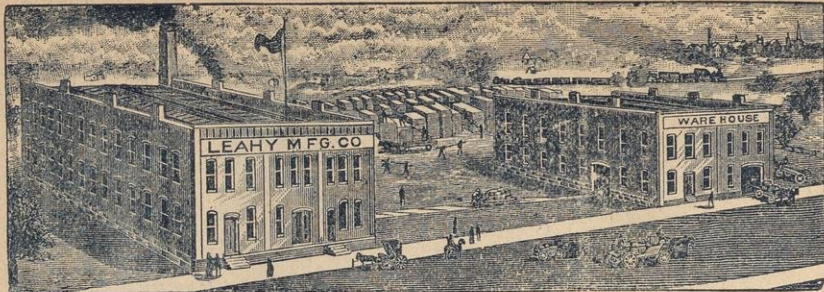
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READ THIS.--Mr. Keyes says: The 100 pounds of extra thin foundation you sent us is superior to anything he ever saw, and I think the same. R. L. TUCKER, Wewahitchka, Fla

Leahy M'fg. Co.:—I have received the bill of goods. I must say this is the choicest lot of hive stuff I have ever received from any place. I admire the smoothness of your work, and your close selection of lumber. Yours very truly, O. K. OLMSTEAD, Orleans, Neb.

Dear Sirs:—The sections arrived in due time, and are all O. K. so far as examined. They are simply perfection. I can't see how you can furnish such goods at such low prices. I hope you may live long and do well. Yours respectfully, Z. S. WEAVER, Courtney, Tex.

Gents:—I received the "Higginsville" Smoker all O. K. It's a dandy; please find enclosed stamps for another. Yours truly, OTTO ENDERS, Oswegathie, N. Y.

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Dear Sirs:—The sections came duly to hand. Indeed they are very nice. Yes sir, they are as good as the best. CHARLES H. THIES, Steelville, Illinois.

Please send me your catalogue for 1896. The comb foundation and other goods that I ordered of you last year was fine. Yours truly, JACOB FRAME, Sutton, W. Va.

The above unsolicited testimonials are a fair sample of hundreds we receive. Our prices are reasonable and the "Higginsville" Goods are the best.

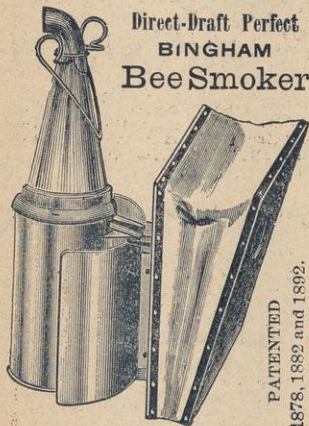
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Doctor { largest smoker made	3 1/4 inch stove.....	\$11.00-Mail, \$1.50	
Conqueror.....	3 " "	6.00- " "	1.10
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Smokers in dozen lots, 10 per cent discount.
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FARWELL, MICHIGAN.

The Progressive Bee-Keeper.

A Journal Devoted to Bees, Honey, and Kindred Industries.

50 Cents a Year.

-:-

Published monthly by Leahy Mfg. Company.

VOL. 7.

HIGGINSVILLE, MO., JAN. 1, 1897.

No. 1

THE LESSON OF TRIAL.

We stand beside the sea of life,
And gaze toward the farther shore,
Beyond the scenes of toil and strife,
Where comes no sin forevermore.
And earnestly we often long
To cross the shining silver tide,
Removed from care and pain and wrong,
And meet the cherished friends who died.

To leave the trial-troubled earth,
And drift away without a care,
Transfigured by a later birth
As holy as the heart of prayer.
With hopes fulfilled, desires attained,
Would we be happy in that sphere?
No, heaven's fullest bliss is gained
Alone by those who sorrow here.

Then let us idly stand no more
By life's storm-troubled, heaving sea;
But bravely do the tasks before,
Our duties, whatsoever they be.
For 'tis a truth of noble worth,
Yet simple as the Golden Rule,
The lessons trials teach on earth
But fit us for God's highest school.

—Will Ward Mitchell.

A SEA-SHELL.

I walked by the silvery ocean,
And picked up a beautiful shell,
And bore it afar from the waters
It seemed to remember so well.
For today with my ear put near it,
I listened, and, lo! unto me
It sang with a musical murmur
The song of the far-away sea.

I put down the sea-shell and pondered.
What lesson in this can I find,
To remember wherever I wander,
The sunny-hued days left behind,
The joys of a youth unforgotten,
Of a childhood forevermore fled,
To strive to make gladder the living,
Though sad for the loss of the dead.

Let us live in our beautiful April
Of life that hereafter we may
Sing, like as the murmuring sea-shell,
Of the scenes of an earlier day;
May the music make weary hearts gladder,
As singing we go evermore,
Till we shine in our robings celestial
Like shells on the ocean-kissed shore.

—Will Ward Mitchell.

SUGAR SYRUP FOR BEES THAT WILL NOT GRANULATE.

G. M. DOOLITTLE.

A CORRESPONDENT wishes me to tell the readers of the PROGRESSIVE BEE-KEEPER how to make sugar syrup to feed bees so that it will not crystalize or granulate in the feeder and cells after being fed. This was an item that once bothered me, so one fall when I had considerable feeding to do after a very poor season, I began to look over my old files of bee papers to see how best to make feed, hoping to strike some plan better than what I had formerly used. In one paper I found that all I had to do was to pour boiling water on the sugar and stir it, when it would be ready to feed as soon as cool enough, so that the bees would not be burned by it. As this was the most simple of all the plans I had ever seen, and required but little work, I thought to try it. The feeders which I used were division board feeders and as these feeders allow the bees to go inside of them, there would, of course, after they had once been filled, be more or less bees in them when the feed was poured in the second night. It is known by all that if honey is poured on bees it does them no more hurt than water poured on a duck's back, providing that the bees do not drown in it; so I could see no impropriety in turning the feed on them just the same as I would honey.

All went well the first night, but when I came to see the syrup the next night, I found it skimmed over with a

crust of sugar, which had formed on the surface of the syrup during the twenty-four hours it had been standing. I also found that it had crystalized on the bottom and sides of the can; and upon going to the hives I found a little on the sides and bottom of the feeders. However, I persisted in feeding it as the one recommending this way said that syrup thus made needed no cream of tartar nor vinegar in it, till one day I noticed bees at the entrance of each hive fed, in large numbers, having little grains of sugar on their wings and bodies where the syrup had crystalized on them. These bees were trying to fly, but the most of them had so much sugar on their wings that they could only hop around, making a funny purring sound in trying to do so. I next looked inside of the hive, when I found that fully one-fifth of the bees had more or less of these sugar crystals on them, while the inside of the feeders were all covered with them. Upon looking into the cells containing the syrup I found that in many of them crystalization had commenced to such an extent that the crystals were easily seen. This I thought would never answer, so when the next batch of syrup I boiled I put vinegar in the water before the sugar was added. This seemed to help much about the crystalization, yet it gave a taste to the syrup which I did not like, so in the next I tried cream of tartar, and then tartaric acid, but in spite of them all, the syrup would crystalize some, unless I added so much that a disagreeable taste was given. While studying over this matter it occurred to me that years before during some experiments made to prevent honey from granulating I had used sugar syrup in one of these experiments, which syrup had accomplished the desired end of keeping the honey liquid when cool weather came. I said to myself, that if sugar syrup would keep honey from

granulating, why would not honey keep sugar syrup from crystalizing? So the next batch of syrup was made as follows:

Fifteen pounds of water was weighed out and put in a tin vessel of suitable size. This was now placed over the fire and brought to a boil, when thirty pounds of granulated sugar was slowly poured in, stirring the same briskly all the while so that it would not settle to the bottom and burn, as such sugar is somewhat liable to do if poured in at once and not stirred. This stirring was kept up till the sugar was partly dissolved, when it was left over the fire till the whole boiled again, when it was skimmed. It was now taken from the fire, when five pounds of good thick extracted honey was poured in and stirred for a moment or two, so that the whole should be mixed thoroughly.

This honey proved to be just what I needed, for syrup thus made remained liquid day after day when not fed to the bees immediately, and even after keeping it for several months by way of experiment, it was found to be as good as ever. In this I had a feed easily made, the whole giving me fifty pounds of feed of about the consistency of honey; none of which has ever crystalized a particle, although I have used this feed whenever necessary to feed the bees for ten or twelve years. For stimulative feeding in the spring, I use the same feed, only as we wish the bees to carry the largest number of loads possible, (for in this carrying comes the greater part of the stimulation,) I use the same number of pounds of water that I do of sugar. As soon as the feed is cool it is ready for use, and in all cases where feeding is to be done, it is equally as good, if not better than honey.

After using the above for many years I consider it the best syrup that can be possibly made for feeding bees where we are obliged to feed anything but

honey, and would recommend it to all who at any time find their bees short of stores. Some fear that the honey of commerce, (should they have to buy the honey they put in the syrup,) might contain germs of foul brood, so would not be safe; but let me assure such that so little honey put in boiling syrup is perfectly safe, as all germs would be destroyed by the heat, if the syrup is made as above given.

Borodino, N. Y.

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A WARNING.

TRUST you will allow me space to warn readers of British Bee Journal against risk of serious trouble after the honey-flow has stopped, as may be seen by what follows: I had been removing my surplus during the week and previous weeks, and had left my extractor, cappings, strainer, dishes, etc., all wet with honey, together with the jars I had used for bottling, exposed in my work-room. This was its condition at 6 a. m. on Saturday, the 1st inst., when I left it with the window wide open, with injunctions for others to shut at 8 o'clock before the bees began flying for the day. But the others forgot; and on going to my room at mid-day I found it full of bees busily engaged "cleaning up" the loose honey for me. When they had got all they could in this line, they flew around the house in a particularly savage way, searching for more "spoil," and while thus engaged they had occasion to pass our kennels when a valuable cross-bred "Redlington" hound thought he would amuse himself by catching a few of them, so he started and killed some, and very soon there was a smell of formic acid, consequently, a "row," which ended by the dog having to be rescued, covered with bees, after he had in the affray swallowed a few scores of them. Two other dogs got stung, and also several people. The poor hound first mentioned lived only till midnight, when he

died while asleep through drinking sal volatile and carbonate of soda. We rubbed him with ammonia and put him in soda baths, but all was of no avail, as he was too badly stung. Poor fellow! he will be missed in the district, as he was a champion fox-drawer (and killer) when "to-ground." I have had a hunter lent for four seasons for his splendid work. I am having his skin stuffed to preserve the dog's memory and his reputation for pluck. He always had a hatred of bees and wasps, and I had on several occasions to stop him scratching at wasps' nest.—C. B. Elmhirst Farnham, Knaresborough, Yorks.—British Bee Journal, August 13.

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WAYSIDE FRAGMENTS.....

by

SOMNAMBULIST.

THE New Year reigns! May he so decree that peace and happiness attend all the PROGRESSIVE family. Little did we think when welcoming the advent of '96 that he would so cruelly rob us of so many of our jewels. Last month we felt it our painful duty to proffer condolence to the Review on the loss of so many of her best contributors. Alas! now it is our turn to mourn the untimely death of one of our most cheerful and entertaining correspondents, Mrs. A. L. Hallenbeck.

Snatched like a flash, without a note of warning, from the bosom of her family of eight fatherless children, while at her post of duty. Evidently the children had gathered up the one morsel of consolation connected with the manner of her death, as the daughter relates that, having died instantly, she knew no pain. That she was a true Christian, and prepared to make the change, none who have read her writings can doubt. In the October PROGRESSIVE we find her saying, "Are not many of what seem to us the severest

trials of life often our greatest blessings in disguise? I do not think our Father above willingly afflicts His children, but I believe He knows best, and while our ways are not His ways,

'Still by His own ways He leads,
Ways we cannot tell;
Onward leads us, upward beckons,
Whispers, 'All is well!'

and concludes by saying, "Those whose hearts and hands are employed in trying to do the Master's work, can always find something to be thankful for." Is it any wonder that she thought that she had been well repaid for all trouble and expense connected with her trip to the Lincoln convention, through the hearing of Dr. Miller's song, the chorus of which ran thus:

"I'll go where you want me to go, dear Lord,
Over mountain, or plain, or sea;
I'll say what you want me to say, dear Lord,
I'll be what you want me to be."

"Nebraska Notes" will be sadly missed from among the pages of the PROGRESSIVE. But our loss is her gain, for she was of the number of whom it may be said, "She hath done what she could."

I see, too, that we are to lose S. E. Miller, and who will go up head now? Sorry he has so concluded, even if he did so want to scold me now and then. Really a little scolding gives spice to life and there must be some one to see that the required amount is provided. I fear I shall always need considerable, and who is to furnish it? Surely not E. B. Gladish, with his smooth polished ways, nor yet Will Ward Mitchell, with his sweet poetic fancies. I rather "suspects" it'll fall on you R. B. L.

Friend Miller's "Balls of Glue" hit pretty hard and were pretty sticky. One that he loved to hit me with was that I wrote so little about bees. Now I know that the PROGRESSIVE is a bee journal, but I (and I make free to presume that others have met with a similar experience) have found out that

there are a few things of interest in this world other than the bee industry. In fact, were the truth made known, with the majority engaged therein, 'tis not the sole object of life. While any one with a spark of ambition, wishes to secure success in each and all of his undertakings, first, last and all the time, our very existence must have first consideration. Were bee-keeping, strictly speaking, the only resource, I fear many of us would be compelled to throw up and call it a lost game. True it is, that under the most favorable conditions, "the right man in the right place" as it were, bee-keeping as a specialty will do. But these conditions, as we all know, are rarely found. What wonder then that we find an interest in things foreign to beedom? And of course "out of the abundance of the heart the mouth speaketh." I truly wish I was so situated as to be enabled to make a specialty of bee-keeping. I love it, and I have been duly notified by medical authority that in a certain sense, my continued being largely depends on an abundance of out door exercise. Bee-keeping is sure for furnishing the outdoor exercise and were it only as sure to furnish the bread and butter and a few other staple commodities of life, I would bid farewell to "vanity fair" and retreat to within dame Nature's realms, in the seclusion of which I should expect to find superior comfort and happiness.

From "Notes from Foreign Bee Journals"—Review:—always interesting, we glean the following: The correct principle in feeding, in order to avoid robbing, is to attract the the bees towards the entrance; then there will be a sufficient number of guards on duty to quell all undue advances of marauders. (Score one in favor of entrance feeders.) It seems there has been a question up as to "how to account for the place of propolis in bee economy." By turning to Webster's dictionary we find propo-

lis (Gr. before the city or in the front of the city.)

A thick odorous substance, having some resemblance to wax and smelling like storax; used by bees to stop the holes and crevices in their hive to prevent the entrance of cold air. etc. With us a superabundance of propolis is an indication of strength. A strong colony will have all chinks closed, while a weaker one, that most needs the protection, will have failed, presumably from want of numbers.

"Two bee-keepers report, that a visit to the bees is always followed by a violent cold," while another reports a bad case of emption from exposure to propolis. A solution of camphor is the best apifuge. Aspinwall of wooden comb fame calls our attention to irregularities in cell making in this wise: "It is a well known fact that bees when changing from the construction of worker to drone cells, build many which are irregular, both as to shape and size. Such are known as transition cells. Although most of the irregular cells have six sides; still a few pentagon or five sided ones can be found. To construct comb in which worker and drone cells are contiguous, both of which shall be perfect, is one of the impossibilities, even with such skilled artisans as honey bees. Thinks "there is a glimmer of something for the future" in artificial comb.

Right glad are we to know the "Canadian controversy" is at an end. To say the least, quarreling is scarcely elevating. Size and shape of sections is a subject receiving considerable attention just at present. Editor Hutchinson argues that "as the retailer buys by the pound and sells by the section," the more sections he gets to the same number of pounds the better he is pleased. The larger the comb surface, no matter if it is thin, the more honey apparently. Knows from experience that thin sections are more rapidly produced with less proba-

bility of being deformed, consequently less need of separators, and sections filled without the use of separators are plumper in appearance. "A rim of wood standing up around or above the surface of the comb gives the section a lean look."

There, Mr. Editor, you've expressed my ideas of a thin section. They look lean to me. Perhaps it is because that at one time whenever we ran across an extra thick section one of the assistants would delightedly cry out: "Oh, see that big fat one." If thin sections are less likely to vary, uniformity itself would influence appearance. He thinks an oblong section would appear to contain more honey than a square section, as well as being more artistic; hence, more handsome or attractive. "A section $1\frac{1}{2}$ inches thick, $3\frac{1}{2}$ inches wide, and five inches high, used without separators, would be the one that would bring the most money." On referring to the Question Box of American Bee Journal, we find nine favor the square form, nine have no preference, and four prefer the oblong form. Hasty, touching slightly on this subject, says Dr. Miller likes to have his sections weigh little enough so that no trickster can undertake to pass them for pounds, whereupon he, Hasty, thinks the dealer will cease to be pleased. It occurs to your humble servant that the quality of the honey and the character of its cappings might cut a figure. With first-class honey and heavy pure white cappings, giving the appearance of embossed work, no doubt the more surface exposed to sight, the more beautiful. But often the cappings are thin and seemingly flattened, and the honey beneath seems slightly dark, when in truth it is of first quality. Under these latter conditions, would not the thin sections suffer from their very flatness. Or would they not appear lean? With more surface exposed, would we not be

compelled to watch the closer and remove super the more promptly to avoid the travel stained appearance, and inasmuch as 'tis claimed they are the more rapidly produced, would not the whole arrangement be calculated to make us "get up and dust." A change of style in sections would require a corresponding change in style of super, and the question would naturally arise, would the gain justify this extra expense? Hasty thinks "Doolittle in error, where he says it takes more honey to winter where winter means from the middle of October to the middle of April than it does in the South." The mild weather of the South with no honey flow is a trying experience unknown to the North. Also, says Greiner's methods of manipulation would be nice provided they were always reliable. Now, Hasty, have you ever found a general rule with absolutely no exception?

Naptown, Dreamland.

SWEET CLOVER (MELILOT) AS A HONEY PLANT.

THE following essay by William Stolley, of Grand Island, Neb., was read at the Convention of the N. A. B. K. A. at Lincoln, Neb.:

"My experience respecting sweet clover was gained during the last sixteen years. In the autumn of 1880, I sowed the first seed, and in the summer of 1882 I had the first sweet clover bloom for my bees to work on. My location is naturally not well adapted to bee-keeping, and what success I have had in the production of honey, I may say is nearly exclusively attributable to sweet clover growing in easy reach of my bees. Before sweet clover grew in larger quantities, I got some surplus in favorable seasons, but the honey was of a very inferior quality. Since I have sweet clover growing in sufficient

quantity within easy reach of my bees, I consider that I have a very satisfactory location with reliable resources for my bees.

I honestly believe that there is no nectar-yielding plant (having reference to Nebraska and adjoining states) that can in any way cope with sweet clover as to reliability as a honey-yielder.

While I write this (Sept. 20) the uncut melilot has considerable bloom on new shoots on the lower part of the stalks, while the ripe seed on the upper branches has already dropped to the ground. Sweet clover which was cut about the first of July, is white with bloom, and bees work well on it. What final result the eventual spreading of sweet clover all over our state will bring about, remains to be seen.

I believe that sweet clover will soon enable the so-called western states to rank with the best in the union as to honey production, although without sweet clover this would never be possible.

I have found that the driest seasons, and when nearly all other crops fail, sweet clover is at its best—and therefore I believe that tracts of sandy land, not redeemable by irrigation, will gradually be converted into first-class honey ranches, with sheep raising as an adjunct, by the rational culture of melilot.

The past summer's experience has taught me two new lessons about sweet clover. One of them is, that while a destructive hail storm destroyed the entire small grain crop in my neighborhood, sweet clover recovered so quickly from the temporary setback received, that hardly anything was lost to the bees. The other lesson is, that the early cutting of sweet clover, in June, does not always insure a second growth of it, if it happens that a very wet spell follows the cutting, and when the cutting is very close to the ground.

I lost a field of about four acres, which was cut on June 15, and was cut

very close to the ground. The following ten days we had nearly five inches of rainfall, and the land, although not overflowing, was kept very wet, and the result was that the entire field of melilot was killed out, hardly a plant escaping.

This season (1896) melilot began to bloom as early as June 15; in other seasons it is sometimes a week later in blooming.

Now, when I state the result obtained in my apiary for the years 1895 and 1896, keeping in view that sweet clover was nearly my only reliable resource up to Sept. 1, as to surplus this year, I have said about all I can say about sweet clover as a honey plant.

In 1895, my average surplus per colony was a little over 175 pounds, and my best colony gave me 236 pounds of surplus extracted honey.

This year (under adverse conditions) my average surplus per colony has been a little over 100 pounds, with from 35 to 40 pounds of winter stores in the brood chambers; and my best colony has given me 210 pounds of surplus extracted honey. I had but three swarms from twenty-six colonies, but was compelled to increase up to thirty-five colonies, so as to prevent swarming as much as possible.

WILLIAM STOLLEY."

WORK AT MICHIGAN'S EXPERIMENTAL APIARY.

R. L. TAYLOR, APIARIST.

Feeding Back.

IT has been thought worth while to repeat the experiment in feeding back extracted honey for the completion of unfinished sections. It has also been found more convenient and desirable to do so owing to the fact that the character of the season has been such that the percentage of partially filled

sections has been greater during the past season (1896) than ever before. This was owing to the shortness of the honey season and the slender character of the honey flow. The extent of this was such that but now and then a colony completed even one case. For the purposes of the experiment four colonies were selected. All were hybrid bees, so-called, and very few strong. For a brood chamber, each colony was given a single section of the Heddon hive containing frames equal to five Langstroth frames. Doubtless a brood chamber even smaller, perhaps as small as two and a half L. frames, would have been better, and this for two reasons. First, much less of the honey would have been required for the rearing of brood, as the extent of that would have been reduced by one half. I have heretofore given reasons tending to show that it requires two pounds of honey for the production of one pound of brood and that a section of the Heddon, hives if almost entirely devoted to brood, would contain about ten pounds of it. If this is substantially correct, it will be seen by consulting the table presented herewith that twenty pounds of honey would be required every three weeks to produce the brood of each of the colonies used in this experiment. This amount of brood might have been reduced by one half without detriment to the well-being of the colony, and one half the honey saved. Second, what I have just said appropriately introduces this point. The number of bees continually hatching from five L. frames full of brood constantly increases the strength of the colony so that if feeding is continued any length of time, with the crowding necessary for the production of comb honey, swarming is induced. This would be detrimental to the highest success of the work. With about half that amount of brood the strength of the colony would be kept good and swarming avoided, for it must not be too readily accepted that a small brood chamber without reference to the degree of smallness conduces to swarming.

The feeding was begun the 15th of July, soon after the closing of the flow from clover and basswood. Two or more cases of sections were kept upon each colony and the honey given as rapidly as the bees would take it. The was prepared for feeding by thoroughly incorporating with it about one half its own weight of water on the supposition

that in this condition the bees would handle it more rapidly.

The work with colonies two, three and four was closed August 6, one day more than three weeks, owing to the fact that on that date or shortly before they had cast swarms, rendering it undesirable to continue them in the work. Colony No. 1 was retained in the experiment until the 29th of August, nearly six and a half weeks. This colony was particularly adapted to comb building and showed that, during the first half of the period, but later owing probably in part to the low temperature which prevailed during August, its work was less satisfactory.

Up to August 10th there was no noticeable amount of honey coming from

larger amount of brood. If, however, we allow that No. 3 reared an amount of brood equal to that reared by No. 4, viz., eight H. frames full and deduct from the amount fed each the twenty pounds supposed to be necessary for the rearing the brood we see No. 4 accounts fully for all the remainder in its case, while No. 2 lacks eighteen and a quarter pounds of doing so. In like manner, on the above supposition, No. 2 accounts for nearly all the honey given it, while No. 1 comes short of it by more than thirty pounds. It can hardly be that the amount of honey required by different colonies for the rearing of the same quantity of brood can vary very greatly, nor the amount required by the adult bees for food where the

Number of colony.	Net weight in pounds of unfinished sections put on the hives.	Amount fed, in pounds.	Amount of honey, in pounds, when completed.	Gain in pounds.	Per cent of gain to amount fed.	Pounds of honey fed for each pound gained.	Gain in honey in brood nest.	Per cent of gain to amt. fed with honey in brood nest considered.	Heddon frames of brood, July 15th.	H. frames of brood at the end of the experiment.
1	225	168½	317¾	72¾	55	1.81	10¼	61	7¾	6½
2	62	76½	111½	46½	64.7	1.54	¾	65.7	8	8
3	99¾	75	136	36¾	49	2.04	5¾	55.6	8	6½
4	66	67½	114½	48½	71.9	1.35	½	72.5	8	8
Total	452¾	378½	679¾	227¼	58.7	1.70	16½	63		

the fields, but later there was some considerable being gathered, though colony No. 1, being fed, seemed to participate to a very small extent in it, not bringing enough to tinge the color of the comb honey in process of construction, and so I judge not sufficient to make it an appreciable element in the problem under consideration.

Turning now to the table we find some questions presented which are not altogether easy to answer. We find there so striking a difference between the work of colonies as that one requires more than two pounds of honey to enable it to add one pound to its store of comb honey while another requires but a trifle more than a pound and a third. It might be surmised that the one requiring the larger amount had expended it in the production of a

strength of the colonies is about equal. At present I see only two other ways of accounting for the deficit, viz., quiet robbing and varying amounts required for the production of wax. Robbing as an outlet is hardly to be relied upon; wax production seems more likely to afford some measure of relief. If table is examined closely it will be seen that the sections given Nos. 1 and 3 averaged much heavier than those given Nos. 2 and 4. Can it be then that the much greater proportionate amount of cappings of the honey to be done in the one case, calls for the production of wax for use in the capping as to account for the apparent discrepancy? It may in some measure, and, besides, some colonies may practice putting more wax into a given extent of comb so as to make it stronger and safer. It

is plain there are abundant subjects yet for investigation in bee culture. Figures may be made in different ways to determine the amount of profit there is in feeding back. I consider the value of the unfinished sections as about equal to that of the extracted honey, say six cents. This would make value of these two articles entering into this experiment \$50.38 cents. I compute the value of the 679½ pounds of comb honey produced, at 12 cents per pound which gives a total value of \$81.57, or a profit of nearly 62 per cent.

Lapeer, Mich.

A TRIP TO ARKANSAS, ETC.

J. W. ROUSE.

HAVING a call to go to Arkansas for the Ozark Fruit Company, in the interest of bee-keeping, I started that way, but stopped off at the home of ye editor of the PROGRESSIVE. I was received and treated right royally while there, and having a large and respectable (the editor is *large* and I am *respectable*) number of bee-keepers present, we had a bee convention that lasted from five o'clock p. m. until twelve, and was resumed again next morning until train time. I went to Kansas City, where I took a through berth to Mena, Ark. This is a mountainous country. I went up on top of the highest mountain, and thus was high enough to obtain a large number of bee courses which I may follow up some time in the future.

This place being so far from any market except home consumption, bee-keeping, like almost all other pursuits, is not very well developed. a railroad (the Kansas City, Pittsburg, and Gulf road) only having reached this place about three months since, a town containing perhaps some 2500 inhabitants having been built since August 1.

There are only a few bee-keepers in this part of the country, but in a fair

season bees are reported to do very well. I think that with an experienced apiarist bees could do better.

On my return trip I stopped off at a number of places in northern Arkansas and southern Missouri, where I found it much better for bee-keepers, the pursuit being considerably more developed. There are already large orchards in that vicinity, and much more are being set out. The Ozark Fruit Company will set out some 1600 acres in fruit trees, having a good portion of it already out. My opinion of Benton county, Arkansas, is that it will soon be a very good place for bee-keeping.

After finishing my work on this trip, I wended my way back to Kansas City, where I took the train to Marceline, to meet with the Missouri State Horticultural society in their meeting there. I was there at the request of the secretary of the society, to give a lecture on bee-keeping. My heart was made glad at the very kind reception I received, and treatment accorded me in the meeting. The horticulturists have a very kindly feeling for bee-keepers. I was made to feel very much at home in the meeting, having an appointment on a committee even before I had become a member of the society. I had the pleasure of introducing a resolution, which after a little talk by us was passed without discussion, as follows:

"Resolved that this society strongly advises fruit growers in spraying fruit trees with poisonous insecticides, not to do so while the bloom is out, as at that time it practically does no good, but may do great harm, by poisoning large numbers of our helps in fruit growing, particularly the honey bees."

I consider this resolution important, and wanted the endorsement of the state horticulturists, from the fact that there are some spraying machines being sold in Missouri with instructions to spray while the bloom is out. No

well informed horticulturist will spray when the trees are in bloom, but there are some who do not know the injury they are doing themselves and bee-keepers by spraying when the trees are in bloom.

When it came time for my lecture on bee-keeping, I started out, but before I had got fairly warmed up to my subject, questions began coming in from all sides, showing that I had a subject that was of much interest. I left off speechmaking, and answered questions on bee-keeping for quite a while, which seemed to be very satisfactory all around. I opine that there will be several more bee-keepers the coming (next year's) season than there are now.

I was greatly delighted with my visit at this meeting. It makes me feel very much like going again. Fruit growers, knowing the great advantage bees are to successful growing of fruit, are very friendly to bee-keepers, many of them being bee-keepers themselves.

Mexico, Mo.

THE DYING YEAR.

FRED S. THORINGTON.

AS I write this December morn, all nature seems draped in deep mourning, as if for the dying year. The diversified sceneries of nature vie with each other to see which can mourn the deepest. Even the wind is still, as if in sympathy with all around. Well might it be thus, for who of us wishes to part from dear friends, or exchange them for new, untried ones? December, too, is rapidly passing away. It and the dying year, like parent and child, are fondly clasped in each other's arms. They seem to realize their approaching death. In a few more breaths, each day a breath,

they will lie down in the cold world to die, and for aught I know, they will both be placed in the same coffin and buried in the tomb of nature beneath the feet of the incoming new year. They will soon pass away, and will live, only in history, or the memories of the people. The grand old dying year has brought to us many blessings for which we should be ever thankful. It is true it has brought to many homes misfortune and death, and filled many a heart with untold sadness, but have not the years gone by done the same? Let the dying year down gently, and let its last sleep come in peace. Many times within the year has the bright bud of hope unfolded, and given in its bloom many joys to the writer. Kind words have been spoken, acts of kindness performed, for which I will ever be thankful. Sometimes I think that one kind word spoken in the ears of the living does more good than any funeral eulogium, though it be ever so pathetic and eloquent with things that ought to have been said years before. We put on cold tombstones what we ought to put in the ears of the living. Some writer, I know not whom, once said:

"O, the anguish of that thought, that we can never atone to our dead for the stunted affection we gave them. for the light answers we returned to their plaints or their pleadings; for the little reverence we showed to that sacred human soul that lived so close to us, and was the divinest thing God had given us to know."

Straws from the Apiary,

The best thing I can find to clean the burr-comb from any part of the hive, or to clean bottom-boards, or to cut the burs between combs, is the tobacco knife such as the tobacco raisers use when in the fall they split the stalk, cut, and scaffold it. It is a thin piece of steel about three inches wide, and $3\frac{1}{2}$ inches or so long, a little narrower at

the top than the bottom end. This is riveted to an iron T handle about a foot long. The knife should be brought to an edge (not too sharp) before using. Any blacksmith can make one by having directions. The top of T handle is usually made of wood fastened on to the iron by a hole in its center, and the iron passed through far enough to head down nicely. I find this handy in cleaning the top of frames when putting on crates. I sometimes use it to clean crates, and the sections before they are taken from the crate. By its being so wide, it cleans fast. Of course I finish cleaning the sections after taken from the crate.

Keeping Moths from Bees.

I see by the PROGRESSIVE, October number, that Friend Felt wants to know the best method of keeping moths from bees. Friend F., the editor gave you the best advice known, and if your bees don't sting you too much, (and I don't believe they will, for I don't believe a hornet would be mean enough to sting you), you had better take his advice and italianize your bees, and keep young prolific queens, keeping your colonies strong. I don't think the editor of the PROGRESSIVE will care if I tell you one of the best places on earth to get nice Italian queens is of R. B. Leahy, Higginsville, Mo.

This last fall I received a letter from New York. The writer wanted to know if it was advisable to move bees from the location they had occupied ever since he had kept them, to a new location for no other purpose except to get rid of moths. He further stated the bees were strong and seemed all right, but he saw moth eggs and webs. He didn't say whether he found these eggs and webs on the inside or outside of the hive. I could not make out by what he said if the moths bothered his bees or not. If they did, why did not

he find millers or worms, (moths) as he called them, as well as eggs and webs? Be that as it may, I told him it was no use to move bees to get rid of moths, for the millers had wings and could fly to the hives anywhere they were located. I further gave him the advice that Brother Leahy gave Brother Felt. It has been my experience that moths can appear in a hive though a miller never enters it to deposit her eggs, but she can deposit her eggs near the hive entrance. Then the bees unawares carry them in on their feet, and in summer there could be eggs present in a hive at any time, though no millers got in, and a weak or queenless colony is soon overcome by the eggs hatching into moths, if left alone. A strong colony will carry them out as fast as their presence is found. In fact, they are the best moth-trap the bee-keeper can get. Several times in the past the writer has put on two combs at a time, containing many moths in among the brood of a strong colony, and awaited results. In a few moments after I put them in, the nasty looking moths would be on the outside of the hive airing themselves, squirming around, and as I suppose, holding a hasty consultation as to how they got there, and the next course of procedure, while the carpenter bees were busy inside fixing the combs as good as new.

Now, dear editor, we would be more than pleased to have you come to see us if you should ever come to Chillicothe. I hope you will. You will be sure of a warm welcome. We live five miles east of Chillicothe. Go on the Linneus road four miles, thence north one half mile, then east again one half mile. I think you and Mother would have a good visit talking over old times back in the state of New York, her native place, and I assure you the rest of us would enjoy your company.

Chillicothe, Mo.

BEE-KEEPING.

LITTLE BEE.

A GREAT many persons consider bee-keeping a very pleasant, nice and easy occupation, which it is for those who keep bees only for pleasure. Many recommend bee-keeping for ladies and invalids, and by looking at the bright side of apiculture, it *seems* just the thing for ladies and invalids. While I have often heard the remark made that bee-keeping is an occupation for a lazy man, but, personally, I found it to take a well, able-bodied, industrious and an intelligent person to make bee-keeping a success.

Any person can keep bees, but it takes a good deal of patience and hard labor at times, as well as other hardships, which will turn up in this line of business, such as may turn up at different times and localities, with other drawbacks. A person who can manage an apiary so that the bees will keep the bee-keeper, can say it is all right, and say it is a success. No other can call it success, unless it is those who keep bees for pleasure.

Many a beginner starts out with only the view of the bright side in apiculture, and soon finds himself in such a situation as the man who got the elephant. (He didn't know what to do with it). So it is with many who undertake bee-keeping. They get to a certain point when they do not know what to do with the bees so as to make bee-keeping profitable.

The invalid who undertakes bee-keeping for a livelihood soon discovers that it is not such easy work as he anticipated, and the lady who undertakes it, soon finds it equally as hard, or harder, than proper housekeeping.

While an invalid may be able to manage and care for a small apiary for him-

self, he could not give satisfaction in doing the work for another person who owns bees, as such persons who hire help only want an able-bodied person who can get around and do the work when it is needed. Even if the invalid has a perfect knowledge of the business, they are liable to give out just at the time when their labor is most valuable and most needed.

An invalid may oversee an apiary and direct an assistant to do such work which must be done. With an able-bodied assistant to help him, he may be able to make bee-keeping a success.

At times there is some heavy lifting to do in the apiary, as well as in the honey room; and at times there is considerable of trotting to do during the manipulation of bees, or while working in the apiary, such as going to the workshop and back to the apiary for such things as may be needed at the time. Considerable labor is attached to the managing of out-apiaries, which an invalid will find very hard indeed.

I would not advise an invalid to try bee-keeping for a livelihood unless he has sufficient capital to enter into the business himself properly, and be able to hire an assistant to do the work. Beside this, an invalid should have a good knowledge of bee-keeping so that he will be able to direct his assistant as to what to do to make it a success.

As for ladies, it will do for a lady to keep a few colonies either for pleasure or what may be gained by it. But on a larger scale they will not find it as easy and nice work as they might imagine, even if they can be out in the bright sunshine and enjoy outdoor work.

There is a good deal of other work for ladies, for which they are better fitted than bee-keeping, especially when married. While for a single lady it will do, providing she is

able bodied. Ladies are quite handy in the honey room and in the workshop, even more so than some men, in such work as uncapping combs, assorting sections, and preparing honey for the market, and in putting up frames, sections, and other such work. But when it comes to the general work of bee-keeping, it is not the proper place for them. So I believe, although there are some successful lady bee-keepers.

Many persons consider bee-keeping a very pleasant, nice and easy occupation, and enter into the business with only the bright side in view. Now I will give to such who contemplate entering into the business, a few points on the other side, the dark side, as there are many drawbacks in bee-keeping for a livelihood.

For instance, right here at Cliff, New Mexico, in this locality, we are about thirty-three miles from the nearest railroad station, and drayage will cost one cent per pound from Cliff to Silver City, New Mexico, which is the nearest point to railroad. We are a long way from the market, and freight is high. For a crop of honey we depend mainly on alfalfa, which is grown for hay, and is often cut down before the bees have a chance to gather the honey.

Living here is rather high. The nearest church is in Silver City. Our neighbors are few, and most of them are Mexicans. A trip to Silver City and back by stage will cost \$6.50, and board and lodging for two nights and a day will cost at least \$2 or \$3, making it \$9.50, besides losing three days of labor.

Therefore, a person, who must economize, *must* do without church, and put up with a great many inconveniences; stay at home and attend strictly to his business, and keep posted by reading different papers and journals.

The climate here is not so extremely hot in summer nor is it so extremely cold during the winter. We have very little or no snow in this valley although there is snow in the mountains. The most beautiful season of the year is in the fall, and the most disagreeable season is from January to April. This summer was an exceptionally wet one, and the bees therefore only gathered about one-third of a crop of honey. Had the season been a dry one, they would have done well. Therefore we lost considerable honey on the account of the wet summer.

We are not troubled in losing bees during the winter here. The hardest season on bees in this locality is during spring, as they will run short of stores, for we have late frosts.

In migratory bee-keeping, expectations quite often are doomed by a failure, with a lot of expense and hard labor wasted. While in the north and east many colonies of bees are lost during the winter and spring, in other localities many are lost by spring dwindle, and others by paralysis. In some localities whole apiaries are ruined by foul brood. Besides this, many bees are lost by slipshod work, and robbing.

Bees often cause trouble with neighbors who do not know how to appreciate their value as being beneficial (of course through ignorance). Again, at times it is quite an expense to save an apiary, by feeding them to keep them from starving, and at such times it requires a good deal of care and good judgment while at work in order to make it a success. Much more can be said to this, or on the dark side of the business, but few will see it until they have spent a number of years in the work and care of bees. And as it is the fact, they will stick to keeping bees anyway, and try again.

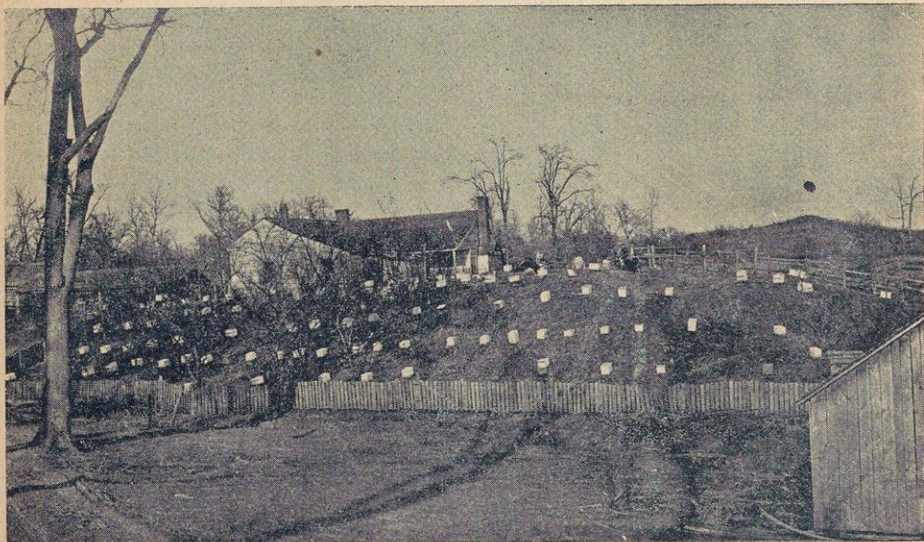
Cliff, New Mexico.

CHICKASAW APIARY.

WE herewith present to our readers a photograph of the apiary of E. W. Moore, located in Gibson county, Ind. There is something about this apiary and the "old home-like" appearance of the surroundings that reminds me of the time when I farmed and kept bees. In the February PROGRESSIVE we will show to the beekeepers the apiary of D. E. Keech, of Martinsville, Mo. The following is a description of Mr. Moore's apiary, by himself:

dians. This yard contains 125 colonies of three-banded Italians, mostly in eight-frame dovetailed hives. This yard is on a hillside facing west and south. My wife Mamie, and the Warren children, are standing at the end of the grape arbor.

The hill in the distance has had many Indian relics found in it, such as skeletons, Indian beads, pipes, flint-heads, and tomahawks. The granary is in the right hand lower corner of the picture. The locust tree standing in front of yard and west of the house, is an old landmark. Wood and buggy shed shows in front and north of house.



CHICKASAW APIARY OF 150 COLONIES, IN GIBSON COUNTY, INDIANA.
OWNED BY E. W. MOORE, OF GRAYVILLE, ILLINOIS.

CHICKASAW APIARY is situated on the south side of a small range of hills that stand in the midst of the Wabash bottoms, in Gibson county, Indiana. This range of hills was at one time the burial ground for the now almost extinct Chickasaw In-

This photo was taken in March. Your humble servant is not shown here, as the artist and Mamie got tired of waiting for me to get to the yard. This is the oldest house in the township, having been built about forty years ago.

Grayville, Ills. E. W. MOORE.

HANGING SWARMS.

W. H. RITTER.

IN the November PROGRESSIVE, Somnambulist refers to the question, How long is it safe to let a swarm remain hanging before concluding that there is an unclipt queen in it? In my experience of twenty years, I have found it safe to leave a swarm hang one hour. I have often had swarms hang three hours before I could get them down. My apiary is on a southeast slope, shaded by large oak trees, and is a very comfortable place to handle bees. I have only practiced clipping five or six years. You can't tell what a swarm of bees will do every time. Generally a swarm with a clipt queen will return to the hive in search of the queen in half an hour, but not every time.

One evening, about four years ago, I had a swarm come out about four o'clock. I had a queen trap on that hive, and captured the queen. The swarm settled on a tall oak. It was a cloudy evening, and looked like rain till nearly sundown. I kept my queen in the trap till sundown, and still the bees stayed in the tree, and I had to go after them. I hived them, and they did well. Having a queen trap on that hive satisfied me that there could not have been a queen with the swarm. If a swarm comes out late in the evening, and has a queen, and settles, and gets quiet, they will stay till eight o'clock next day.

There is always an element of uncertainty about the clipping of queens. You go through all your hives, and clip a queen in each hive, and you think you are all right. Maybe you are, and won't have to climb after any swarm. Then, again, sometimes a swarm has two or three queens. I have had a great deal of trouble before

I began to clip queens, of having swarms come out early in the season without the queen. Often I have had them come out and settle twice without the queen. They will come out, if it is fair weather, day after day, until they get a queen out with them. I have found that by close observation you can tell every time when they have a queen. When they settle without the queen they are apt to settle in two or three places near together, and they will never get quiet, and, as a general rule, will begin to return to the hive in twenty minutes.

Springfield, Mo.

HAPPY NEW YEAR.

LITTLE BEE.

A HAPPY and prosperous new year to all, is the wish of "Little Bee." I'll come no more as "Little Bee."

1897. How about amalgamation now?

I'll just tell Somnambulist a pretty good locality in Missouri, where 150 colonies properly managed will do well. It's just north of St. Louis, near a town called Baden. Try it, and see. There is also a good home market for honey, and by moving the bees about fourteen miles north, up the river, near the outlet of the Missouri river, at the proper time, you can get a crop of goldenrod honey. I'm not certain that the honey-producing plants are there yet, but that was a good locality in 1887. Of course there are localities here in New Mexico that are better, but if you desire a No. 1 locality for honey, I would advise you to go to Southwest Texas. I'll assure you success there, if you make every lick count. There is a large, unoccupied field for beekeepers which is equal to any in the United States. Now, Sommy, this is

just between you and me. Don't tell anyone of this, for they may get ahead of you. You know you and I are good friends. Don't come to New Mexico, for the bears might get into your apiary some night when you are at Nap-town in Dreamland.

Sorry I could not attend the convention at Lincoln, for I am personally acquainted with many of the Nebraska bee-keepers. You know circumstances alter cases. My good wife and little girl just arrived here at that time to join me in this sunshine state of the wild and woolly west. Mrs. "Little Bee's" health has improved greatly since she arrived here, and she likes New Mexico. At the next meeting of the North American, I'll try and do like Somnambulist—come myself.

By the way, did you read the October issue of the Pacific Bee Journal? It contains a good many valuable articles. Its editor is wide-awake and means business. He intends to publish it monthly hereafter. California, with all its great bee-keepers, ought to assist the willing editor who is working to their interest, and by so doing, help make the Pacific Bee Journal a success.

Cliff, New Mexico.

THAT NEW "UNION" SCHEME.

W. D. FRENCH.

HAVE just read in the American Bee Journal, on page 790, a most dastardly attack on the General Manager of the old "Union." The writer has not manhood enough to sign his name, and so calls himself "Union." The scheme no doubt is to break into the Union treasury, and appropriate the money it has accumulated for the defence of its members, in their lawful rights, and as they think that the pres-

ent Manager stands in the way of their "scheme," they attempt to assassinate him—morally.

After having manfully stood by the bee-keepers for twelve years, and won every case defended by the Union in the courts of the land, it is shameful to persecute him the way Mason, York, and Root are doing. It is simply contemptible.

The idea that he must now be pitched out of office at their instigation, simply because he pointed out the weakness and incompleteness of the Constitution adopted at Lincoln, Neb., is a disgrace to bee-keepers. They cannot point to anything he has done, except to his credit, and so they make a subterfuge of the matter that he is now living in California, and not in Chicago. Do they not know that about one-fourth of the members of the present Union are located in California?

By the way, I remember that over a year ago the American Bee Journal suggested that Mr. Newman should go to California, the land of "climate and flowers," for his health and that of his family. Was it desired to get him away from Chicago for the purpose of making the present excuse?

The most cruel stab of all, is the reflection upon the honesty of the General Manager—by suggesting that the votes must be prevented from passing through his hands (as usual) to be counted by the Returning Board. It seems not to be enough to insinuate that he must not be any longer trusted with the funds of the Union, but also that he is not even honest enough to receive the votes and pass them over to the usual Committee to count and certify as to who is elected. The only reason that can be given for thus casting a suspicion is that he has dared to show the faultiness of the proposed Constitution. We should be glad to have him watch our interests, and it

shows that he is "the right man in the right place." Let the bee-keepers see to it that their deep-laid scheme is frustrated, and let the Union go on as it has in the past, winning laurels for our pursuit.

If we had no funds in the treasury, they would not be so anxious to amalgamate. Who gave them the right to copy the name, "Bee-Keepers' Union," when one by such name already existed, and was honoring it by winning lawsuits everywhere?

My advice to every member of the Union is to vote against "amalgamation" at the coming election.

National City, Cal.

OUR

:: Letter Box.

A "Progressive" Bee-Keeper.

I see by label on journal that my subscription has expired. I requested you to send another order sheet when time was out, so you must take the blame for not having my cash sooner. I owe to the PROGRESSIVE BEE-KEEPER all I know about bees, and as long as I can get the money, the PROGRESSIVE shall come to old Posey county, Ind. We have had a very poor season here. Bees lived from hand to mouth all spring and summer. I had but one swarm from 27 colonies. I will give my report from 1894: Fall of 94, from 10 colonies, 800 pounds section honey. Fall of 95, from 16 colonies, 1,285 pounds section honey. Fall of 96, from 27 colonies, 725 pounds section honey. We have gotten all our supplies from E. T. Flanagan, Belleville, Ill., the past two years, so you see they are of your make. I have started several parties to keeping bees. Dr. Hale, Mr. Reagin, W. W. McGraw, Lucy Fueting and others

are buying supplies from you. Enclosed please find postoffice order for two years subscription to the PROGRESSIVE. Yours Truly,

Mt. Vernon, Ind. A. E. SMITH.

Climbing to the Front.

Friend Leahy—I have for two or three months been wanting to give your journal the complimentary notice that I think it deserves, but the Review has been terribly crowded. I am going to say something, if it is only a little, just as soon as I can. It seems to me that there is no journal that is climbing to the front more rapidly than yours. I say this frankly, even if I have a journal of my own. Yours Truly,

Flint, Mich. W. Z. HUTCHINSON.

Likes the Simplex Type Writer.

You will find enclosed \$2.75 for the Simplex Type Writer, which I received a short time back. I like the writer very much. Yours Truly,

Rathborn, Mo. GEO. T. COX, P. M.

The "Progressive" the Best.

Dear Sir—Enclosed please find post-office money order for 50c, for renewal for the PROGRESSIVE BEE-KEEPER for 1897. Your journal is instructive. I like it best. Respectfully yours,

REV. J. RAMSER.

Falls City, Neb.

Likes the 'Higginsville' Smoker.

Gentlemen—Please find enclosed \$1.00 for which send me another "Higginsville Smoker." I have used the one you sent me, and it is a "bird." I like it very much and want another.

Weister, Idaho. J. W. AYERS.

Highly Pleased.

Dear Sir—I received the foundation all O. K. It was fine, and the express charges was only 35 cents. I also received the queen and Mrs. Greeson was highly pleased with it as a premium with the PROGRESSIVE for \$1.00.

Cameron, Mo. J. O. CARVER.

A Fine Paper.

Your paper, the PROGRESSIVE BEE-KEEPER, is a very fine paper on the subject, and is just the very thing for bee-ginners. Ever Yours,

Fair Grove, Mo. C. L. YARBROUGH.

A Pleased Customer.

I received the goods you shipped me 37 days after you shipped them. The agent at Wallace said the only mark on the goods was the letter "G." My name was not on them, so they laid there for about 20 days. The goods you sent me was first-class, and I expect to give you all my trade in the future. With best wishes I remain as ever yours truly,

Delta, Idaho. W B. GILLILLAND.

The Goods First-Class.

The goods I ordered of you came to hand several days ago, and after looking them over I found the goods to be first-class, and like the make-up well. If nothing happens I hope to order more goods very soon. I found everything all right; all the pieces what belong to them. Very Respectfully,

New Madrid, Mo. F. BUERING.

The Best Ever Purchased.

The foundation and escapes received. They are indeed the best I have got from any dealer in supplies at the

prices. All orders after this go to the Leahy Mfg. Co. Yours Thankfully,
E. St. Louis, Mo. H. E. LEVELING.

Goods Just as Expected.

The goods I bought from you arrived all O. K. in due time, and the goods are all right. They are all that I expected them to be. I would like to give you my trade. Respectfully,

Sallisaw, I. T. J. W. WOODS.

Goods all O. K.

The goods I ordered from you came to hand in good shape and I am pleased with them. The freight was all O. K. I enclose you a small order for foundation. I could not send you a money order as the agent did not have any, so I enclose you a check for 50 cents more than the order amounts to, so if they charge you for collection you will have enough to pay it. If you do not have to pay anything for getting it cashed, you can give me credit for that amount and I can deduct it from my next order. I would like for you to fill the order at once and send it by express. Respt.

Garden City, Ark. J. L. WILSON.

Fine Shipping Cases.

Enclosed find draft for \$5.55, amount of balance less 35 cents paid for express on foundation. The shipping cases were very fine. May want some winter cases after while. Respectfully Yours,

Holden, Mo. J. M. MOORE.

Goods Satisfactory.

The goods ordered from you came all satisfactory. I think you will receive another order soon, as several parties talk of buying. Very Respectfully,

Cherokee City, Ark. D. T. COLLIN.

Best Material Throughout.

Some time the first part of April, I ordered twenty 8 frames 1E hives. I ordered fifty from you some time after, and received them on short notice, and found them to be of the best material throughout that I ever nailed.

Burden, Kans. A. J. MERCER.

Extra Good Goods.

You will find enclosed one dollar for which please send me 1,000 No. 2 7 to the foot sections $4\frac{1}{2} \times 4\frac{1}{2}$, special order. Please send to I. P. Rogers, Portland, Mo. I received the sections and comb foundation all right; both were extra good, especially the sections, as they were cream sections and the best I ever used. If the 40,000 No. 2 is all gone, send me the next best, and I will remit as soon as I receive the bill. Hoping to hear from you at your earliest convenience, I remain yours truly,

Portland, Mo. I. P. ROGERS.

Elegant Goods.

I received the goods on the 19th, and I am well pleased with them. The reason I did not write sooner, was because I wanted to examine the goods thoroughly before I sent a letter to you. The goods are elegant. Yours Truly,

Cedar Mines, Ia. J. W. HARRISON.

Higginsville Leads.

Gents—Please find enclosed 50 cents for the PROGRESSIVE. The hive covers came in due time, and I am highly pleased with them. I was forced to get five of a dealer here of A. I. Root's make. For neat workmanship, Higginsville leads. Yours Truly,

Des Moines, Ia. JAMES CARMAC.

A Fairly Good Season.

I am well pleased with supplies received from you. I am sure there are no better; also the promptness used in filling order. Many thanks for the

PROGRESSIVE. It is surely up with the times, and I would not like to do without it now. My bees have done fairly well this year; the average per colony of marketable comb honey will be about 60 pounds. Respectfully,

Iatan, Mo. C. M. SILER.

An Excellent Journal.

Allow me to compliment you on the excellency of the PROGRESSIVE, especially the editorials. Please place the name of P. I. Wilkin, Burlingame, Kans., on the subscription list. I believe you could get him for a customer.

Topeka, Kans. H. L. MILLER.

First-Class in Every Respect.

I have neglected to write sooner on account of being busy, but I have intended to write and let you know that the goods were received all right, and that they are first class in every respect. They gave good satisfaction to those I sold to. I could sell more if I had them, but those I have sold to, have nearly all wanted time, and I have not the money to send at present.

Eagle Grove, Ia. S. A. MIDDLETON.

Very Much Pleased.

The bill of goods ordered from you came to hand in good order on the 28th inst. I am very much pleased with it, and by the simplicity of everything is made a pleasure by it. I put the two hives together without any trouble in one hour. Will it be safe to transfer bees now. (June.)

Centerville, Mo. MATT ZOGG.

Yes—ED.

From Antietam's Battle Field.

Kind Sirs—I received the PROGRESSIVE, and was very much pleased with it. You will find money order of 50 cents enclosed for the PROGRESSIVE for one year. I live on home farm on battle field of Antietam. Please send me sample of foundation comb and prices. Have you one piece section, $4\frac{1}{2} \times 4\frac{1}{2}$ 7 to 12 $\frac{1}{2}$? If so, send prices.

Keedysville, Md. L. A. HAMMOND.

The Progressive Bee-Keeper.

A Journal devoted to Bees, Honey and Kindred Industries.

TERMS: Fifty cents per year, in advance.

R. B. LEAHY,)
G. M. DOOLITTLE,) - - - Editors

A happy and a prosperous New Year to all.

We wish our readers would look over the advertisements in the PROGRESSIVE BEE-KEEPER. Remember, they are of reliable firms, as we carry none other. If when writing to our advertising patrons, you would mention the PROGRESSIVE, it will be a help to us.

Look at the envelope in which this journal comes to you, and see if you are not behind with your subscription. If you are, kindly send us fifty cents—only fifty cents. We are trying to give you the best journal we can for the money. Can you not, dear friends, assist us by continuing to subscribe yourself, and getting your friends to do so?

In another column will be found the advertisement of J. A. McCutcheon & Co., of Chicago, Ills. Before taking this advertisement, we investigated as to their honesty and standing. Their bank says: "We believe them to be honest, hard-working people that understand their business." They have the same financial rating in the mercantile agencies as we have.

I have been thinking for some time of getting a real good—if possible, the best posted—bee man to assist me in editing the PROGRESSIVE. Mr. G. M. Doolittle, of Borodino, N. Y., has consented to do this, and I know the friends of the PROGRESSIVE will appreciate our good fortune in obtaining him. Mr. Doolittle, as a writer on apiculture, has no peer. All editorials written by Mr. Doolittle will be start-

ed in *this kind of type*; hence, the reader will know them from those written by myself.

During this month the members of the Bee-Keepers' Union will vote on that amalgamation scheme. All the present members will be entitled to a vote without paying any dues, as the Board of Directors has remitted the dues for the coming year. As it will take a two-thirds vote to amend the present constitution, we predict defeat for the would-be amalgamators. This is all as it should be. Let the present Union stand as it is for the present. If some other organization is needed, let it organize. Let them accumulate a purse; then they will know how its done. We do not want to turn ours over to them, and we want none of them. See what W. D. French has to say on page 18 of this issue. To the amalgamation scheme, vote NO.

Bees in January.—What shall I do with the bees in January? is a question often asked. Well, nothing, as a rule, north of the very southern tier of states; and even there little need be done. for January should be a month of quiet repose with the bees in nearly all parts of the United States and Canada. But will it harm the bees if I "peek" in at them once in a while, for the fun of the thing? No particular harm, if it is done so not to disturb them, and you are "itching" to see them; but control yourself as much as possible. I cannot have the heart to say NO to this, altogether, for I realize that he or she so interested in the bees that they wish to see them often, even in winter, will surely make a success in the bee business. I have kept bees 28 years, but in this matter, am as boyish as ever.

What do in January.—This is a question often asked, especially by beginners. The reply should always be, forward everything as much as possible, looking toward the busy season, and especially post up on everything pertaining to bees, as far as possible. *Read! READ!! READ!!!* all you can get hold of on bees. Then sift out the *chaff* and garner up the *WHEAT*. The granary should be the memory, or, if this is impossible, then by way of a reference book, so arranged that it will tell you where you will find the wheat just at the time you are in greatest need to be

fed on a certain apicultural diet. This reading can be done during the long winter evenings, and daylight be spent in getting ready ALL the paraphernalia needed in the busy season of May, June, July, August and September. Don't wait till the honey season is upon you for fear of a poor season, or that the bees may not winter well. Is bee-keeping to be your business? Then make a business of it. "He that will not plough for reason of the cold, shall beg in the harvest and have nothing." Prov. 20:4. Far better carry over a full supply for a good season, than have a good season come upon you, and find you unprepared for it, or with your order just arrived in the supply dealer's hands. Genuine success will never come to the one who does not have his "dishes ALL right side up when the porridge rains." Do not be deceived, "whatsoever a man soweth, that shall he also reap." Thus if you would reap a good harvest, procure your sections, hives, etc.,—everything which you think you will need, if you have an extra good season, NOW.

[The last clause in this editorial should read, "I am yet of the opinion that a nice cream section will be as advantageous to the sale of honeys as snow white sections"].

Concerning "Snow White" Sections the following editorial appeared in *Gleanings*, December 1st:

"SNOW-WHITE" SECTIONS, AND EFFECT IN CONTRAST.

"Is it not a mistake to have "snow-white" (so-called) sections when the combs themselves, as a general rule, are darker by contrast? A darker cream color for the wood sets off the honey much better; indeed, some bee-keepers, realizing this fact, in spite of the "fad" for snow-white sections, are demanding the cream colors; and as time goes on I am sure this demand will increase. A house painted white looks snow-white in the summer time, with a foreground of green grass; but in the winter, after a fresh fall of snow, that same house looks dark and dingy by contrast.

It is very well known that the wood of sections that have been on the hive for a time becomes discolored by—well, a sort of hive yellow that can't be scraped off or otherwise removed. Then there are the stains of propolis and travel-stains. While the propolis can be scraped off, the discoloration will remain. All of this soiling appears more glaring on a "snow-white" section than on one of a darker shade. Then, too, the honey will appear whiter in the darker wood. I grant that genuine fancy white comb is white; but the No. 1 grade, as a rule, will be darker than the average of white sections on this market."

When I read the above, I felt like saying "amen," but while I was pleased with it myself, I thought best to feel of a few commission houses, consequently I wrote to a number in Kansas City, Chicago and St. Louis; as far as they have replied they are as follows:

Leahy M'fg. Co., Higginsville, Mo.

Gentlemen—Yours of the 10th, enclosing a clipping of "snow-white" sections received. One fact the writer of that article omitted and that is, if the white cases and white sections get dirty—then they are dirty. Comb honey is a luxury, and the finer the case and the finer the section the better the appearance and easier the sale. We prefer snow white sections and snow white cases for fancy honey. For poor honey you can have black sections and black cases, so it will make no difference. Good trade will not buy poor honey—it is only used by manufacturers and peddlers. Respectfully,

Chicago, Ill.

S. T. FISH & CO.

Leahy M'fg. Co., Higginsville, Mo.

Dear Sirs—We prefer the white wood for sections. When we open up a case to show a buyer, we think a white frame, well cleaned before packing, shows up nicer than dark wood. As for showing the honey in cases very little of the wood shows, but do not believe dark would improve the looks of honey. We think the snow white wood cases much nicer looking than cream. Yours truly,

Kansas City, Mo.

HAMBLIN & BEARSS.

Leahy M'fg. Co., Higginsville, Mo.

Gents—We note your favor in regard to sections for honey. To please the eye, is a fact, the shipper should not overlook. First impressions are hard to remove. Medium white or cream colored natural wood, odorless and tasteless, we consider the best for all grades of honey. The fancy white looks white, and the medium and lesser do not look so dark when put in sections of this color as when put up in white wood sections. We judge things by comparison. One pound sections are the preferable size for this market; and cases with glass front, 24 sections to the case. Cream color are the most desirable packages; as they are light, easy handled, and less liable to breakage and better size to sell to majority of the trade. Yours truly,

St. Louis, Mo.

WESTCOTT COM. CO.

Leahy M'fg. Co., Higginsville, Mo.

Dear Sir—Yours of the 10th received. In reply will say that we can hardly agree with you in regard to the dark crates and dark sections. We have always been of the opinion that you could not get a crate or section too white, especially if it is natural wood, and we are still of that opinion. Yours truly,

Kansas City, Mo.

C. C. CLEMONS & CO.

From the above, it will be seen that three out of the four responding commission firms favor SNOW WHITE while only one favors CREAM WHITE. There is one thing brought forward by the letter of Hamblin & Bearss that I had not taken into consideration, that is,

the taking the cover off the crates to allow purchaser to see the back rows of sections. While this is very proper, we always thought honey was inspected through the glass front and sold on the merits of "what is in sight," the same as peaches, strawberries, etc. While the above letters as a whole look a little discouraging to the CREAM sections, I am yet of the opinion that a nice cream section will be an advantage to the sale of honey in *snow* white sections.

The following is Mr. Doolittle's comment on the above subject:

The foregoing is a clipping from Gleanings, and shows there is a change for the better coming over our supply dealers, for if there has been any one thing carried on by bee-keepers, which has had a tendency to curtail our crop of white honey in the middle and northern states, it has been the craze for "snow-white" sections. There are two times in our work when the spotless wood and the polish of the manufacture, takes the desires through the eyes, after which these points are never thought of by any save the manufacturer and the supply dealer. These times are when we are manufacturing sections and making them, or getting them ready for the bees. Ever after that, the producer nor the consumer rarely thinks of the sections themselves, at all. During my twenty years of apicultural life I have used woods for sections of various kinds, including black cherry, butternut, red elm, ash, oak, beech, maple, (hard and soft) basswood of all shades and color, and sumach. Sumach is one of the most beautiful of woods, with its yellow and brown so commingled as to please the eye; and while I was getting out and making sections of this wood, I was continually exclaiming "how beautiful!" and all who happened in while I was putting these together would express themselves in a like manner. Time went on, and these sections were filled with honey. Customers called, when they would exclaim "how nice that honey is!" but I could not secure a single word of praise for the sections. As this sumach wood cost me more than others, I charged half a cent a pound more for the honey so as to make me good; when I was always met with, "what do I care for the section or how it looks. It is the honey I am after. As soon as I cut the honey out I shall

doubtless burn the section. Then who cares whether it is nice or homely. The section never goes on the table with the honey." Nor could I get any honey dealer to say anything about the sections, or pay me a higher price for fancy sections than those which had been on the hive for two or three years, till they were quite "grimmy" from use. They always governed their price from the appearance of the honey, the sections not coming into account at all, unless I called their attention to them. Neither do I think the "contrast" spoken of by Gleanings, comes into the account very much, for the edges of the section, which comes to view when looking on the face side of a comb of section honey, are so small in proportion to the rest, that the eye of the ordinary consumer does not see the section at all. We should remember that it is the consumer that always pays the price in the end, and that which satisfies the consumer should satisfy all; especially, where it is to the beekeepers interest not to have his best forage tree annihilated to satisfy this craze for snow-white sections, which only go to kindle the fire in the end.

Unfinished Combs in Sections.—

In a late number of the American Bee Journal, the question was asked if unfinished sections, when filled the second time would make first-class comb honey. Out of 20 answers, 11 said no, 5 said yes, on conditions, and 4 answered yes, without conditions. This is an old question and one that on which the "doctors" have disagreed during the past. In the past some have gone so far as to advise cutting the combs out of these unfinished sections, and putting the whole in a sun wax extractor, so that the wax might be separated from the honey, when the sections were to be burned; new sections filled with foundation to be used to take their places. I have always opposed such a course as being one of the most mistaken ideas ever advocated by any sane bee-keeper, and have claimed that such unfinished sections, when properly managed, were of more value than money in the bank. Now, what do I mean by properly managed? This: To remove the honey from the combs, uncap that portion which is sealed, allowing the uncapping knife to run from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch under the cappings, when the remaining honey is to be extracted, or

the bees allowed to carry it out—as in case any colonies need feeding; when they are to be stored away as “bait” sections, or if we have more than is needed for this, put them on the hives during a good honey flow. But further than this uncapping, I have never leveled the comb down, nor do I see it to the advantage of the bees, the producer, or the consumer to do more. The only object in the “comb leveler,” is that the bees may lengthen the cells somewhat during the second filling, so that the whole surface may be new, after being capped over the second time. All that is necessary along this line is accomplished with the uncapping knife, for all uncapped cells at the end of the season, do not come out full and plump, as they do in the height of the honey harvest. After twenty years of experience along this line I find that just as first-class comb honey can be produced from these unfinished sections as can be produced from new sections BUILT AND FINISHED AT THE SAME TIME. If such sections are very slow in being finished, or are filled with fruit blossom, mustard, fall flowers or buckwheat honey, of course they are not first-class clover or basswood. But they are *first-class* of their kind, and when slowly filled, they may not be first-class in all respects; but they MAY be the ONLY class of honey you will secure. Second class honey in a poor year, is better than none. I am glad to see that the current of opinion is changing in this matter, as the opinions of many in the past, savored too strongly of great wastefulness.

Sections for Less than Cost.

We have the following sections that have accumulated on our hands the past season, and to close them out to make room for new goods we will sell these for less than they cost to manufacture them. You will notice that they are all Cream's and No. 2. The reason of this is there is a greater demand for Snow White in the narrow sections like 1½ inch and the 7 to ft. The result is an accumulation of these No. 2 and Creams:

- 5,000 4¼x4¼x2 inch No. 2.
- 5,000 4¼x4¼x1½ No. 2.
- 62,000 4¼x4¼x7 to ft. No. 2.
- 3,000 4¼x4¼x8 to ft. No. 2.
- 1,000 5¾x6x2 inch No. 2.

We offer the above lot in quantities

of 500 and up at \$1.00 per 1,000.

The following is a choice lot of Cream sections:

- 82,000 4¼x4¼x7 to ft. Cream.
- 8,000 4¼x4¼x8 to ft. “
- 13,000 4¼x4¼x1½ “
- 500 4¼x4¼x1½ “
- 2,000 5¼x6¼x2 inch, “
- 1,000 5x6x2 inch, “
- 1,000 5¾x6x2 inch, “

Any of the above in lots of 500 or more at the rate of \$1.50 per 1,000.

We also have the following 1½ sections:

15,000 No. 2 sections 4¼x4¼x1½. Price \$1.65 per 1,000.

20,000 No. 1, Cream sections 4¼x4¼x1½. Price \$1.85 per 1,000.

Bear in mind that these will not last long and when they are gone they can't be reproduced for the money asked for these.

LEAHY M'F'G. CO., Higginsville, Mo.

HONEY JARS.



A good small package for retailing honey in is the square honey jar shown in the cuts. They are the cheapest and most popular small package we know of. We handle the Powder Jar, which is made in three sizes, and packed 100 in a package. The prices are as follows:

- 5 oz jar, 25c for 10; \$2.00 per 100; weight 30 lbs.
- 8-oz " 30c for 10; 2.60 per 100; " 45 lbs.
- 1-lb " 40c for 10; 3.40 per 100; " 75 lbs.

Corks always included. Neck labels for these jars 25c per hundred; 500 75c.

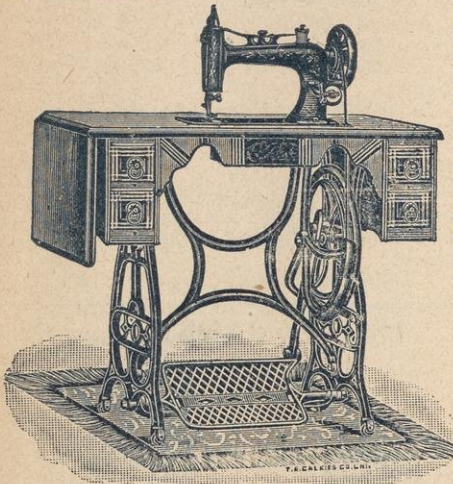
WANTED!

10,000 pounds of beeswax, for cash.

LEAHY MFG. CO., Higginsville, Mo.

"NEW PREMIUM."

A HIGH ARM, HIGH GRADE, NOISE-LESS, LIGHT RUNNING, SELF THREADING SEWING MACHINE, for only \$19.50.



We pay the freight to any point within 1000 miles, and if you are not satisfied with your purchase—yes, more than satisfied—you can return the machine and get your money back.

The "New Premium" took the medal at the World's Fair, and is strictly a high-grade Sewing Machine in every respect, and the only way we can furnish them at the low price of \$19.50 is by buying them in large quantities direct from the factory. The machine is guaranteed for family use to last for ten years. In other words, you are getting a \$50 machine for only \$19.50. Remember the guarantee; also that we will take the machine back if you are not satisfied. Send in your orders at once to the

Leahy Mfg. Co. Higginsville, Mo.

Honey Shippers.

In shipping honey to the CHICAGO MARKET one of the most **urgent** points to be followed is to know that you are consigning or selling it to an **old** and **responsible** house. We handle Honey quite extensively, but not exclusively. We claim to be in **better position** to net you better results than such Houses who make a specialty of Honey, for the reason, that we cater to the **best class** of **Retail Merchants** in our city; they all handling Honey find it to their advantage to purchase of us while buying their other supplies such as

Poultry, Butter, Eggs, Etc.

It will be to **your interest** to correspond with us before making disposition elsewhere. Write for stencils, prices, etc. We also handle beeswax extensively.

J. A. McCutcheon & Co.,

222 North Water St.,

1-6t

Chicago, Ill.

Reference—First National Bank, Chicago, Ill



This Clevis being adjustable fits any plow. Only one kind to keep in stock. Ask your dealers for them.

Address. Mention this paper.

KRUSE KROSS KLEVIS CO.,

HIGGINSVILLE, MO.

Please mention the "Progressive."

Special Renewal Offers.



Prompt renewals are so desired that I am going to make special offers. For \$1.00 I will send the Bee-Keepers' Review for 1897 and the 50c book, "Advanced Bee Culture," or, in place of the book, 12 back numbers of the Review. For \$1.50 I will send the Review and a fine, tested, Italian queen—queen to be sent early in the season of 1897. For \$1.75, the Review and a \$1.10 Bingham (Conquerer) smoker, postpaid. For \$2.50, the Review and 1,000 No. 1, first-class, one-piece sections. But **remember**, that these offers will be withdrawn Jan. 1st, as the sole object in making them is to induce the sending in of subscriptions before that date. New subscribers will get the December number free. If not acquainted with the Review, send for samples.

W. Z. HUTCHINSON, Flint, Mich.

Please mention the "Progressive" in answering this advertisement.

Do You Use Tobacco?

If you do, we know you would like to quit the habit, and we want to assist you, and will if you say the word. The use of Tobacco is injurious to the nervous system, promotes heart troubles, affects the eyesight, injures the voice, and makes your presence obnoxious to those clean and pure from such a filthy habit.

How Can we Help You? Why, by inducing you to purchase a box of COLLI'S TOBACCO ANTIDOTE, which is a preparation compounded strictly of herbs and roots, which is a tonic to the system: also a cure for the Tobacco Habit.

Would You Like to be Cured? If so, call on your druggist, or send us one dollar, (\$1.00) and we will send you, postpaid, by mail, a box of COLLI'S TOBACCO ANTIDOTE.

What we claim. This is not a discovery of an ignorant Indian, or some long-haired cowboy claiming to have come into possession of some valuable remedy by being captured out west, but is a discovery of twenty years' study by one of the most eminent physicians of the east, who has made nervous diseases a study.

Throw away Tobacco and you will have no more stomach Troubles, Indigestion, Heart Trouble, or Dyspepsia. Cigarette Smoking is also cured by using two boxes of COLLI'S TOBACCO ANTIDOTE.

Our Responsibility. We would not expect you to send us your money unless you were sure of our honesty and good intentions. Hence, before entrusting money to us, we most respectfully refer you to the Bank of Higginsville, Citizens' Bank of Higginsville, or to the postmaster of this city, as to our responsibility, etc.

Smithville, Mo., May 20, 1895.

Colli Company, Higginsville, Mo.: Dear Sirs—Please send me by mail postpaid, one dozen Colli's Tobacco Antidote, for which find enclosed cash in full payment of bill. The box I got from you I have been using just one week today. I have not craved tobacco since the first day I used it, and the desire has almost entirely gone. I think I can heartily recommend it and conscientiously sell it.

Very respectfully,
J. M. AKER.

Otto, Kas., Feb. 4, 1896.

Colli Company, Higginsville, Mo.: Gentlemen—My pa used tobacco for 40 years, and thought he could not live without it, but he accidentally got a box of your antidote, and it has cured him. There is no agent here, and so many of our neighbors use tobacco, I think I could sell the antidote readily. I am a little boy only 15 years old. How much will I get for selling one box? I have been agent for things before, and always had good luck, and I know I can in this. God bless the Antidote. I am sure I can sell one dozen boxes and right at home.

Yours truly,

WILLIE J. GOODWILL.

How to Send money. Money can be sent at our risk by registered letter, postoffice money order, or bank draft on some commercial center. In no case send local checks. In most cases a dollar can be sent in a letter without registering, but we would not be responsible for any loss thereby.

COLLI - COMPANY....

Higginsville, Mo.

“Higginville Supplies” AT _____
Higginville Prices.

KANSAS people will save freight by
 ordering their

BEE HIVES, SECTIONS, FOUNDATION,
 and Everything Needed in the Apiary,

—OF—
HENRY L. MILLER,
355 SHAWNEE AVE.,
TOPEKA, KAN.

Write at once for his Illustrated Catalogue.



1897.

I am now ready to receive orders for May delivery, 1897. Full colonies of three-banded Italian bees in 8-frame dovetailed hives, \$5. Strong three-frame nucleus, with tested queen, \$2.75. Untested Italian queens, each, 75c; per doz., \$7.00. Tested Italian queens, each, \$1.00; per doz., \$10.00. Best breeding queens, each, \$2.00, \$2.50.

I know what good queens mean to the producer, as well as how to rear them. Safe delivery and satisfaction guaranteed. No disease.

E. W. MOORE,

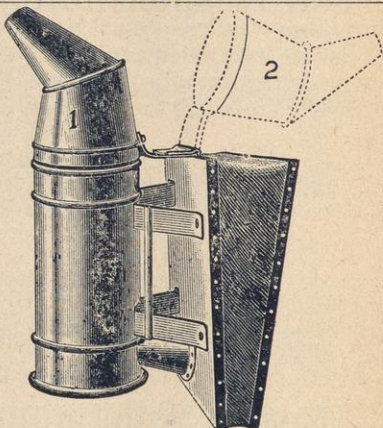
Bx. 103. GRAYVILLE, ILLS.

Please mention the “Progressive.”

WANTED!

10,000 pounds of **BEESWAX**, for
 Cash. Address,

LEAHY MFG. CO., HIGGINVILLE, MO.



THE “HIGGINVILLE SMOKER.”

☞ A Good Smoker for a Little Money.

THE HIGGINVILLE SMOKER A DANDY.

I received the Higginville Smoker all O. K. It's a dandy; please find enclosed stamps for another. Yours truly, **OTO ENDERS,**
 Oswegathie, N. Y.

Price 75c; by mail, \$1.00. Address,
LEAHY MFG. CO., Higginville, Mo.



The Simplex Typewriter.

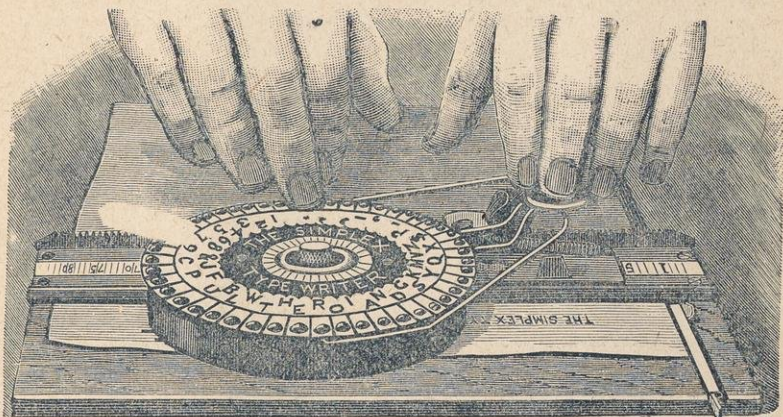


— The Simplest Thing in the World.

The only really practical cheap typewriter ever put on the market.

Is Rapid and Does Good Work. Is Easy to Operate. Is Handsome. Can be Carried in the Coat Pocket.

PRICE \$2.50.



Sci. Am. N.Y.

THE LATEST OF THE BEST TYPEWRITERS. THE CLIMAX OF IMPROVEMENTS. THE MINIMUM OF PRICE. DESTINED TO REVOLUTIONIZE WRITING, AS THE SEWING-MACHINE REVOLUTIONIZED SEWING.

The "SIMPLEX" is the product of experienced typewriter manufacturers, and is a PRACTICAL TYPEWRITER in every sense of the word, and AS SUCH, WE GUARANTEE IT.

FOR BUSINESS MEN.—Every man, whatever his business, has need of the "SIMPLEX," LAWYERS find them indispensable. MERCHANTS acknowledge their great value. CLERGYMEN write their sermons with them. AUTHORS their manuscripts. Letters written with the "SIMPLEX" are legible and neat, and at the rate of FORTY WORDS PER MINUTE.

FOR BOYS AND GIRLS.—The "SIMPLEX" will be hailed with delight by BOYS AND GIRLS. It will improve their spelling, and teach proper punctuation. It will encourage neatness and accuracy. It will print in any colored ink, violet red, green, blue or black. It will PRINT A LINE EIGHT INCHES LONG, and admit any size letter paper. The printing is always in sight. A USEFUL, INSTRUCTIVE AND ENTERTAINING NOVELTY, AT THE PRICE OF A TOY.

Nothing is of greater importance than correct forms of correspondence. The "SIMPLEX" encourages practice, and practice makes perfect. Writing with this machine will be such jolly fun for your boys and girls that they will write letters by the dozen. This may cost you something for postage stamps, but the improvement in their correspondence will repay you.

EXTRA POINTS,

The alignment of the 'Simplex' is equal to the very highest priced machine.

It is positive in action, and each letter is locked by an automatic movement when the stroke is made.

It has no ribbon to soil the fingers.

The "Simplex" is mounted on a hard-wood base, and put up in a handsome box, with bottle of ink, and full instructions for using.

"I think the 'Simplex' is a dandy."—D. L. Tracy, Denver, Colo.

"The 'Simplex' is a good typewriter, and I take pleasure in recommending it as such."—B. F. Bishop, Morsey, Mo.

"I received the typewriter one hour ago. You can judge my progress by this letter. It much better than I expected, and with practice I think I will be able to write very fast with it."—E. T. Flanagan, Belleville, Ill.

Price of Machine, \$2.50. By mail, 25c extra for postage.

Address,

LEAHY MANUFACTURING COMPANY, HIGGINSVILLE, MO

1897.

New

CATALOGUE, PRICES, GOODS.....

1897.

QUEEN BEES IN SEASON.

Three-frame Nuclei and Fall Colonies a Specialty.

Hives,
Smokers,
Sections,
Honey
Extractors,
Comb
Foundation.

AND ALL KIND OF

APIARIAN SUPPLIES

AT
BED ROCK.

Write for estimates on large quantities. Send for my 24-page, "large size" catalogue.

P. S. Save freight! How? Send for my Catalogue and find out.

ADDRESS

E. T. FLANAGAN,

ST. CLAIR COUNTY.

BELLEVILLE, ILLS.

Please mention the "Progressive" in answering this advertisement.

The Amateur Bee Keeper....

A 70-Page Book for Beginners.

—BY—



J. W. ROUSE.



SECOND EDITION JUST OUT.

Many new features added, and the book brought fully up to the times. The first thousand sold in the short space of two years. All beginners should have this book. Price of Amateur Bee Keeper, 25c; by mail, 28c; "Progressive Bee Keeper," monthly, one year, 50c. We will club both for 65c. If not convenient to get a money order, you can send one and two-cent stamps. Address orders to

LEAHY MFG. CO., Higginsville, Mo.

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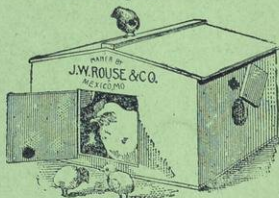
1895.....

Latest Improved Hives and all kind of

Apiarian Supplies, Bees & Queens

Everything Cheap.

Send 25c for the Amateur Bee-Keeper. It will tell you how to begin and how to succeed in bee-keeping.



THE MODEL COOP....

Rat, Cat, and Varmint Proof.

One nailed and five packed inside, making six in all, \$3.50. Eggs for hatching from S. L. Wyandotte, B. Langshans, \$1.50 per 13; 26, \$2.50. S. C. B. Leghorns, \$1.25 per 13; \$2 per 26. B. P. Rocks, \$1.50 per 13; 26, \$2.50.

Catalogue free, but say if Bees or Poultry Supplies are wanted, or both.
Address,

J. W. ROUSE & CO.,

MEXICO, MO.

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