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## **The progressive bee-keeper. Vol. 7, No. 3 Mar. 1, 1897**

Higginsville, Mo.: Leahy Mfg. Co., Mar. 1, 1897

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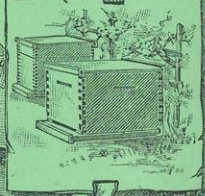
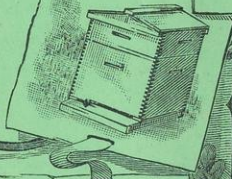
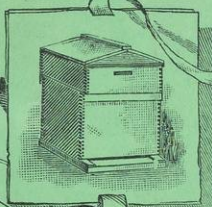
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MARCH 1, 1897.



MURRAY & SONS CLEV. O.

# 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.

## ADVERTISING RATES.

All advertisements will be inserted at the rate of 15 cents per line, Nonpareil space, each insertion; 12 lines of Nonpareil space make 1 inch. Discounts will be given as follows:

On 10 lines and upwards, 3 times, 5 per cent; 6 times, 15 per cent; 9 times, 25 per cent; 12 times, 35 per cent.

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**50 YEARS' EXPERIENCE.**

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361 Broadway, New York.

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We will send the Progressive Bee Keeper with

The Review.....	(\$1.00).....	\$1 35
Gleanings.....	1 00.....	1 35
American Bee Journal.....	1 00.....	1 35
Canadian Bee Journal.....	1 00.....	1 35
American Bee Keeper.....	50.....	85

Colman's Rural World.....	1 00.....	1 35
Journal of Agriculture.....	1 00.....	1 35
Kansas Farmer.....	1 00.....	1 35
Home and Farm.....	50.....	75

## BEE BOOKS.

No bee keeper can afford to be without a library of bee books. A book costing from fifty cents to one dollar is worth many hundreds of dollars to one who would succeed. Every beginner should have a book suitable for beginners, (one that will point out the road), and those more advanced will need something more scientific as a reference book. We will here give the names of such books as we recommend, and will be pleased to furnish you, sending them by mail at the following prices:

**The Amateur Bee Keeper**, a gem for beginners, by Prof Rouse, price, 28c.

**Advanced Bee Culture**,—by W. Z. Hutchinson; price, 50c.

**A Year Among the Bees**,—by Dr. Miller; price, 50c.

**Manual of the Apiary**,—By Prof. A. J. Cook; price, \$1.25.

**The A, B, C of Bee Culture**, by A. I. Root; price, \$1.25.

**A Treatise on Foul Brood**, by Dr. Howard; price, 25c.

Address,

**Leahy Mfg. Co., Higginsville. Mo.**

## Big Bargains

Bring us Big Trade. Goods Keep it.

If you want the best supplies that can be made at a little less cost than you can buy the same goods for elsewhere, write to us for low prices. 1897 Catalogue now ready. Ask for it and a free copy of the **AMERICAN BEE KEEPER** (35 pages). Address,

## THE W. T. FALCONER MFG. CO., JAMESTOWN, N. Y.

Please mention the "Progressive" in answering this advertisement.

## 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.

## S. T. FISH & CO.

189 SOUTH WATER ST..

### CHICAGO.

We handle HONEY every day in the year. Correspondence solicited. We have been twenty years at above location, and refer to

First National Bank, Chicago,  
First National Bank, Los Angeles, Cal.,  
First National Bank, San Jose, Cal.,  
Gleanings in Bee Culture, Medina, O.

Your banker can see our rating.

Also dealers in Butter, Cheese, Eggs  
Apples, Potatoes.

Our facilities for selling unsurpassed.  
Reserve our address for future reference.

Please mention the "Progressive."

### A FREE EDUCATION.

An education at Harvard, Yale, or any other college or institution of learning in the United States, or in the New England Conservatory of Music, can be secured by any young man or woman who is in earnest. Write for particulars quickly. JAMES D. BALL,  
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Please mention the "Progressive."

## WANTED

Agents to sell our new book, Dictionary of United States History, by Prof. J. FRANKLIN JAMESON. Needed by every teacher, pupil, and family; indorsed by press and public. Agents selling fifty books per week. Successful agents will be made general agents. Big pay. PURITAN PUBLISHING CO.,  
107-tf Boston, Mass.

Please mention the "Progressive."

## Texas Queens!

Golden Italians, Adel or Albino Queens.

Dr. Gallup of California, writes Oct. 6, 1896: "The queens received of you are decidedly the very best honey gatherers I have in a lot of 30 stocks, and I have received queens from ten different parties this season." Price of Untested Queens, \$1.00.

J. D. Givens, Lisbon, Tex.,

Please mention the "Progressive."

## 25 CTS.

Send 25c and get a copy of the  
AMATEUR BEE KEEPER,

A book especially for beginners. Address  
Leahy Mfg. Co., Higginsville, Mo.



### MAKE YOUR OWN HIVES

Bee-Keepers will save money by using our Foot Power Circular Saw in making their Hives, Sections and Boxes. Machines sent on trial if desired. Catalogue free.

W. F. & JOHN BARNES CO.,

914 Ruby St.

ROCKFORD, ILLS

Please mention the "Progressive."

## 2 POPULAR MAGAZINES FOR THE HOME.



## FRANK LESLIE'S POPULAR MONTHLY

Contains each Month: Original Water Color Frontispiece; 128 Quarto Pages of Reading Matter; 100 New and High-class Illustrations; More Literary Matter and Illustrations than any other Magazine in America. 25 cts.; \$3 a Year.

## Frank Leslie's Pleasant Hours FOR BOYS AND GIRLS.

A Bright, Wholesome, Juvenile Monthly. Fully illustrated. The best writers for young people contribute to it. 10 cts.; \$1 a year.

### SEND ALL SUBSCRIPTIONS TO

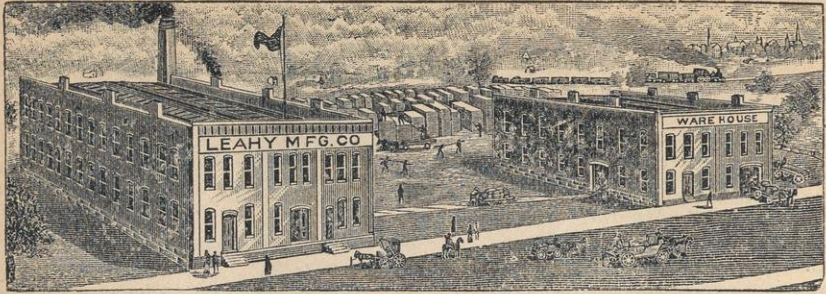
The PROGRESSIVE BEE-KEEPER, Higginsville, Mo.

Frank Leslie's Popular Monthly and the PROGRESSIVE BEE-KEEPER both for one year, for \$3.25.

Frank Leslie's Pleasant Hours for Boys and Girls, and the PROGRESSIVE BEE-KEEPER, both for one year for \$1.35.

## Undoubtedly the Best Club Offers

Send to Frank Leslie's Publishing House, N.Y., for New Illustrated Premium List, Free.



## SECTIONS TO BE GIVEN AWAY.

We have the following odd-size No. 2 and Cream (Mixed) Sections that have accumulated on us the past season while manufacturing No 1 Sections of these sizes. They are a good lot, and for those who can use them, will be well worth the freight. Indeed, they are worth \$2 00 a thousand to anyone who can use them. To dispose of them at once, we offer them free to anyone who wants them. The following is a list of what we have. Make your selection at once.

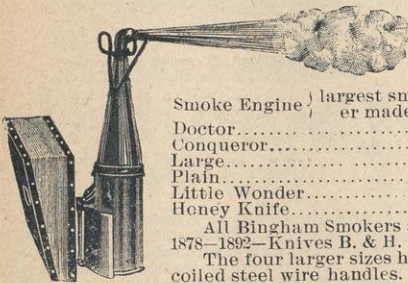
500 5x5 $\frac{1}{4}$ x1 $\frac{1}{8}$ ;    1000 5x5 $\frac{1}{4}$ x1 $\frac{1}{8}$     2000 5x6x2    3000 5 $\frac{1}{4}$ x6 $\frac{1}{4}$ x2    500 5x6 $\frac{1}{4}$ x2  
 1500 4 $\frac{1}{2}$ x5 $\frac{1}{8}$ x2    500 5 $\frac{1}{4}$ x5 $\frac{1}{4}$ x1 $\frac{1}{8}$     500 4 $\frac{1}{2}$ x5 $\frac{1}{8}$ x1 $\frac{1}{8}$     500 5 $\frac{1}{4}$ x6x2    500 4 $\frac{1}{2}$ x4 $\frac{1}{4}$ x2

We also have 1,500,000 of beautiful Snow White Sections of regular sizes. Write to us for prices for sections in large quantities. Also other supplies. Copy of our beautiful, illustrated Catalogue of Apiarian Supplies, and a copy of the PROGRESSIVE BEE-KEEPER free.

Address the leading supply dealers of the West.

**LEAHY MFG. CO., Higginsville, Missouri.**

## PRICES OF Bingham Perfect Bee-Smokers and Honey Knives,



Smoke Engine	largest smoker made.	per doz.	each.
Doctor.....	3 $\frac{1}{2}$ "	\$13.00—	\$1.50—
Conqueror.....	3 "	9.00—	1.10 "
Large.....	2 $\frac{1}{2}$ "	6.50—	1.00 "
Plain.....	2 "	5.00—	.90 "
Little Wonder.....	2 "	4.75—	.70 "
Honey Knife.....	wt 10 oz	4.50—	.60 "
		6.00—	.80 "

All Bingham Smokers are stamped on the metal, patented 1878—1892—Knives B. & H.

The four larger sizes have extra wide shields and double coiled steel wire handles. These SHIELDS and HANDLES are an AMAZING COMFORT—always cool and clean. No more sooty nor burnt fingers. The Plain and Little Wonder have narrow shields and wire handles. All Bingham Smokers have all the new improvements, viz: Direct Draft, Movable Bent Cap, Wire Handles, Inverted Bellows, and are ABSOLUTELY PERFECT.



✓ Fifteen years for a dollar. One-half a cent a month.

Cuba, Kansas, Jan. 27th, 1897.

Dear Sir.—I have used the Conquerer 15 years. I was always well pleased with its workings, but thinking I would need a new one this summer I write for circular. I do not think the four inch "Smoke Engine" too large. Yours,

W. H. EAGERTY.

Corning, Cal., July 14th, 1896.

I have used Bingham Smokers ever since they first came out. Working from three to seven hundred colonies twelve months in the year. I ought to know what is required in a smoker. The Doctor 3 $\frac{1}{2}$  inch just received fills the bill. Respectfully,

O. W. OSBORN.

Mt. Pleasant, Mich., Aug. 7th, 1896.

Dear Sir—Smokers came O. K. They are the best I have ever seen; sell like hot cakes. Respectful y,

WM. BAMBU.

With a Bingham Smoker that will hold a quart of sound maple wood, the bee-keepers' trials are all over for a long time. Who ever heard of a Bingham Smoker that was too large or did not give perfect satisfaction. The world's most scientific and largest comb honey producers use Bingham Smokers and Knives. The same is true of the world's largest producers of extracted honey. Before buying a smoker or knife hunt up its record and pedigree.

Please mention the "Progressive."

T. F. BINGHAM, Farwell, Mich

# THE \* PROGRESSIVE \* BEE-KEEPER.

— A Journal Devoted to Bees, Honey, and Kindred Industries. —  
50 Cents a Year.

PUBLISHED MONTHLY BY LEAHY MFG. CO.

VOL. 7.

HIGGINSVILLE, MO., MAR. 1, 1897.

No. 3

## THE BEES' CALENDAR.

[Written for the Progressive.]

### WINTER.

Now frost with sun contends in all its vigor.  
Daily the breath of bees more close congealing  
To where in one cold lump, devoid of feeling,  
They seem to hang—within, all warmth and vigor;  
And when a mild day makes the mass grow bigger  
Until it draws them out of doors, revealing  
A semblance of their joys, how they go wheeling,  
And how even sawdust glads each little digger!  
Let's go and watch them where the crowd condenses.  
Come here, you whimsy sprite, perch on my finger;  
A moment with your funny brushes fumble.  
What subtle notes offend your dainty senses?  
My, what a serious business—but why linger?  
You *will* stand on three legs? Of course you tumble.

### SPRING.

The pussy willows open, quaint and furry;  
No sooner peep the grains of pollen, than ambitious  
And early bees secure it with judicious,  
Repeated pattings, and away they scurry,  
And day by day much greater grows the flurry  
No longer now for want of work capricious,  
But in some exercise new and delicious,  
For see, the birds of springtime likewise hurry;  
What rarest scents from what recesses mossy,  
What swamp or woodland odor the diffusive  
And softly-blowing airs, to us elusive—  
Come, come, what's this? get out!—of all the saucy—  
You smell my honey, hey?—not so intrusive—  
A few days more, you robbers, black and glossy!

### SWARMING TIME.

Then June perfumes allure the bees to muster;  
In one swift throng they pour and circle, lowly  
At first, undt the entrance streams more slowly  
(Some young bees crowding back, all in a flutter)  
Then higher in the sunlight dart a lustre  
Of wings and coat of mail, rejoicing slowly  
In sweet existence, in solemn song rapt wholly,  
And hastening not their brown and golden cluster.  
How can I tell you what is like their joyance?  
An organ; after-swells of bells that tingle;  
Waves booming on the wet and shining shingle;  
The deeper murmuring of a pine-tree single  
Among the light-voiced thickets; all these mingle.  
Then to them add ungovernable buoyance.

### HARVEST TIME.

Now mild repose; and, nourished in seclusion,  
The white and thick wax walls begin to cumber  
The snowy sections; soaring without number,  
And through the fields long murmurous diffusion—  
O, bees, cannot you banish the delusion  
That mars our toil, our hard-won pelf, our slumber,  
That fills our home and minds with useless lumber,  
While still some dim-seen prize flees in elusion?  
What spell lies in the happy spaces yonder?  
What sovereign antidote is in the flowers?  
What utter freedom follows, as you wander?—  
No, centuries must pass ere man, who cowers  
At unreal wants, your blissful state will ponder—  
Harmonious unforced play of all the powers.

F. L. THOMPSON, Denver, Colo.

## NOTES FROM NEW MEXICO.

F. S. BRAUTIGAM.

**FEBRUARY TENTH.** Just got through overhauling the bees in the apiary. Found one hive queenless out of 260 colonies.

All the readers of the *PROGRESSIVE* appreciate Mr. G. M. Doolittle as one of its respective editors.

I agree with R. C. Aikin, *PROGRESSIVE*, page 46. Let us use *separators and strong colonies* when we produce section honey. Also agree with D. E. Keech, page 45, same journal, to have your honey put up in attractive shape.

Miss Minnie Haha in writing about chunk honey, in the same issue, reminds me of the style I have seen honey put up in, in 60-lb cans, while I was in Texas. Certain parties there put up their honey in this way. They all use nice honey, out of the frames, just to fit snugly in the 60-lb cans, and lay one chunk on top of the other until the can is full; then fill up with nice extracted honey. This looked very nice, and was preferred by many of the consumers as long as the extracted honey was in a liquid state. But, O, what a mess it was when the extracted honey over these nice chunks became granulated.

I, like Fred S. Thorington, would be pleased to see S. E. Miller come back among our ranks again with his Balls of Bee Glue.

We here in New Mexico are served just like you, Bro. Rouse, by foolish questions asked us about bees during

the winter season. It's almost always the first question asked, Do your bees make much honey now? It's too bad that some people know no better. But you know they want to talk *bees*.

R. L. Taylor, in the Review, gives us good points to be considered in the hive question. We are not through with the hive question yet.

Somnambulist gives us the story termed, "A Kansas Parable," in the February issue of the PROGRESSIVE. You see the Kansas people are up to business. They will not permit the world to turn upside down. As soon as they see it beginning to tip, they go to work and turn it downside up. By so doing, they are still on top. That's *business*.

The PROGRESSIVE has a poet of its own, and we all know it to be Will Ward Mitchell.

At present we are having fair weather here in the valley, with sunshine, while on the distant mountains there are snow-storms almost daily.

Here in the valley bees are gathering honey from the mistletoe at present, when the weather is favorable for them to fly.

Cliff, New Mexico.

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## WAYSIDE FRAGMENTS.

SOMNAMBULIST.

IT may be slightly startling, owing to its being far from the ordinary manner of things, and I may be accused of wanting to be sensational, but it's a fact, "allee samee", that Gleanings, of late, assumes quite a *jumbled* appearance. Some sort of infection seems to have seized upon the whole concern, and, indeed, to have reached pretty well out into and over Medina. Could it be possible there's a car-load of jumble cutters to be dispos-

ed of during the coming season? Hardly, I presume, for just at present, the newest fad, the honey caramel craze, threatens to divide honors with the honey jumble, a Mr. Hammond having already had an order for 100 pounds. Who shall say but that more of us possibly may find an outlet for some of our extracted honey over the caramel route? Or, for that matter, why despise the offerings of the humble jumble? Thousands are today making their living soliciting orders for candy manufactories. What is there to prevent our saying to the small honey producers, "Go, thou and dolikewise?" The constant agitation of the subject of honey as food and medicine is destined to bring about good for all. There are cough drops now on the market composed of honey and menthol.

In "Notes from Foreign Bee Journals," we find: "An excellent remedy for all affections of the throat and chest, due to inflammation, such as cough, croup, bronchitis, and pneumonia, is made by slowly boiling 1 pound, 1 $\frac{3}{4}$  ounces, of whole onions, peeled, in which incisions are made with a knife, three or four hours in a quart of water, with 13 $\frac{1}{2}$  ounces of sugar. Cool, strain, and bottle. Important that it remain liquid, and not be thick like syrup. Dose, four to eight teaspoonsful daily, taken lukewarm." (Query, Why not use honey instead of sugar?)

Another reads: "Boil a quart of pure spring water; add as much camomile as can be grasped in three fingers, and three teaspoonsful of honey, and cover tight. The vessel is then quickly removed from the fire, and set on a table at which the patient can comfortably seat himself. Throwing a woolen cloth over his head, so as to include the vessel, he is to remove the cover and inhale the vapors as deeply as possible through mouth and nose, occasionally stirring the mixture, until it is cold, and then retire to a warm-

ed bed. In obstinate cases, repeat for three evenings. Dr. Peiro, in American Bee Journal, (by the way, the Doctor's genial face graces our album, and a little maiden connected with the household, in her rambles through that wonderful volume always designates his picture as "Dr. Pie-dough), contributes the following, and bear in mind, he's unquestionable authority:

"Old people's coughs, being of a distinct character, require especial remedies. Recognized by a constant tickling in the pit of the throat, or where Adam's apple projects, caused by accumulation of phlegm. Simmer a good strong onion in a quart of honey for several hours, after which strain and take a teaspoonful frequently. For stomach cough, boil a handful of wild cherry root bark in a pint of water until reduced to a teacupful. Put this tea into a quart of honey. Dose, a teaspoonful every hour or two. Good also for worms.

For frost bites, wrap in honey."

And last, just take note how the Dr. likes to keep on the good side of the fair sex:

"Honey and cream, half and half, for freckles." No doubt some of the fair ones will hereafter be found in the cosmetic business. Please do not seek to misunderstand me, and pounce upon me and pronounce me too personal. My line of reasoning runs something like this: If sales for honey can be found through confections, why not through cosmetics?

A customer boils as many hops as can be taken up with the tips of the fingers, in a pint of milk, sweetens with honey, and takes a teaspoonful, as needed, for bronchitis. These home-made remedies are frequently vastly superior to the patent ones, on the market for the sole purpose of entrapping money. Of a necessity, pure honey is required, and, insofar, are we enabled to give the adulterated product

a black eye. Speed the day when we shall have completely vanquished our common foe!

And this brings me to drawn, or deep cell-wall foundation. Through extracted honey adulteration became possible. Question—Can we kill adulteration with any more celerity, or certainty, than by a discontinuance of the production of the same? I know this would seem a terrible blow to many of the large producers, but has not the reduction of the price to below cost of production been about as bad?

One of Missouri's most extensive bee-keepers, who was formerly devoted to extracted honey, claimed that we must educate the people up to its use, etc., writes me that he is about to completely change front, as he can scarcely give away extracted honey, while there exists a brisk demand for comb. Who is there to question the unlimited power of that unyielding sovereign—Demand? Why did bee-keepers go into the production of extracted honey? Probably less trouble and greater returns would about cover the different answers to that inquiry. As to returns, drawn foundation promises to place an equality mark between comb and extracted honey. And some of the extra trouble connected with the production of comb honey might be cancelled by the greater trouble in the disposal of the extracted article. So it does really seem that the small bee-keeper, who possesses a home market has adulteration under foot. And this much accomplished, though but a drop in the bucket, on the principle of "every little helps," is not to be contemned. Still, for the producer of tons, and long distance shipper, this problem remains practically unsolved. For the present, their salvation seems to rest with the Union or exchange.

On page 119 of Gleanings, Doolittle in an able and interesting article on "Combs being built to separators; caus-



es, and how to prevent," has the following: "I do claim that the reduction in *width* of section has more to do with the brace comb nuisance than all else combined, (up to the present time,) *except not seeing that hives are level*, and slip-shod putting in of foundation." As to the bees drawing out one side of the foundation at a time, thus causing it to curl and become liable to be fastened to the separators, there exist two causes. "First, too weak colonies to work in the sections to the best advantage, and, second, putting on too much surplus room at once." Then he questions Dr. Miller in this wise: "Do you not know that the veteran bee-keeper, Mr. Manum, who always produces a fancy article of honey which sells at top prices, as a rule puts on only from one-fourth to one-half the amount of surplus room at one time that you and Salisbury do? In this way, as soon as the sections are on the hive, every section is filled completely with bees, and if any foundation is drawn out, the whole is drawn, and the foundation has no chance to curl." (Right here I am compelled to humble myself by confessing to having been caught napping, as I do not know how much surplus room either of the three, Manum, Miller, or Salisbury, give at one time, and after considerable skirmishing around to find out, I am still at the starting point, and beg of Mr. Doolittle that he will give the desired information. Take the eight-framed dove-tailed super for illustration. Is it not customary to supply a whole super at one time, and if desirable to give less, how would you proceed?) Perhaps Manum may have a divisible super similar to that used by B. Taylor on his "handy" hive. But if not, how could we accommodate a regular sized super to this idea? We quote further from this article: "If we have, as a multitude of bee-keepers, erred in any one direction, I believe that to have

been in the direction of trying to 'stretch' our bees out too much, and in this way have received, as pay, imperfect combs of honey, together with thousands of unfinished sections in the fall." Again, "when that comb foundation with  $\frac{3}{8}$  inch side walls comes out, all this trouble, worry, and fussing will be at an end. Then we can use strips only an inch or two wide, and they will not turn, twist, or be eaten full of holes by the bees, or use tall or square, plump or lean, sections; while, if we fill the sections full, we can secure as much section honey as we now do extracted." Then he, very naturally, adds, the cost of this new-fangled foundation must be within bounds, in order that bee-keepers may be enabled to take advantage of its use.

Dr. Miller uses the two starter plan above and below, to avoid this defect, and to secure solid built sections, and says, "For the bottom starters, I'd be willing to pay a big price for foundation with cells well drawn, so it could stand up alone." Editor Root, while he acknowledges that "the price of any commodity must not exceed what customers can afford to pay," also tells us we need not expect to secure this novelty at or near common foundation prices for this coming year at least, and of course fails to say how much longer common folks with ordinary means must wait. So that anything appertaining to the successful production of comb honey by any of the old and well-tried methods will still be welcomed.

A. I.'s roughing it out west is full of interest. Just think of a confirmed hot water drinker going over to coffee, and gaining eleven pounds in two weeks! "Never drank such delicious coffee before, and never expect to again." Now, Mrs. Root, why don't you compel him to recant? For certainly you can get as good material there as we of the west can buy, and don't allow him to underrate you in that style. Has it

ever occurred to you, dear reader, why A. I. Root's writings are so generally acceptable and popular with the public? Is it not that he treats of everyday life in everyday language? Of this fact I was forcibly reminded on the reading of the following clipping from the Chicago Times-Herald:

"Uncle Gawge Dismakes is an ebony shepherd who leads his flock in the green fields and by the still waters of Christian faith in and about Mt. Sterling, Ky. A little while ago, Uncle Gawge was at the parsonage in town, visiting a brother of the white persuasion on a matter of secular business.

"En I was 'vited into de study," said the dark preacher, telling of the incident. "Dem white preachahs," he continued, "is jis got to have 'er study." Out in de fiel's on clar days, en down in de barn when it rains, is study 'nuff fur dis yar fightin' man of de Lawd; dar whar I kin see de Marster smilin' in de sunshine an' harvis'. er weepin' wid dem tear-drops from de skies. Dar he was, in his study. En he had mo' big books eroun' him en would load er wheelbarrer. Here was two on dis side, en two on dat side, en two in front, en some was on de flo', en dey was kyart loads on de shelves. I say, What you doin' wid dem books, Brudder Smif? En he say, 'I'm preparin' mer sermont fur de next Lawd's day.' I say, Is you gwine to preach ont en all dem books, Brudder Smif? En he say, 'Cose I is.' I ain' say nuffin den, but I kep' up a monst'ous thinkin' all de way home, en I say to mysef, I did: Dat ar good Brudder Smif gwine to stack his fodder too high fur de calves."

Naptown, Dreamland.

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### AN INTERESTED LADY BEE-KEEPER.

CAROLINE ABBOTT.

WILL you admit to your circle of correspondents a bee-keeping spinster who comes timidly, not hav-

ing anything new of a practical nature to bring? I have had only one year's experience as yet, and that a very poor *honey year*. Contrary to habit, Kansas was treated to a superabundance of rain just when the honey was coming in freely. As our straightforward little servants do not deal in watered stock, they spent much of the season hanging out about the front of the hives, deluding their inexperienced mistress into the belief that they were about to swarm. Nevertheless, I gained ever so much over and above my observations of their habits, and the small credit put down to me by an accommodating grocer for my first and only consignment of honey, (to be traded out by the family in coffee and codfish).

During the preceding winter I procured a copy of the "A B C," and spent half my leisure for weeks in the study of the fundamental principles of bee-keeping. I became so interested that I could scarcely wait for spring to come. Having attended to the spring work according to direction, and manufactured a swarm catcher, (a bag sewed on a hoop and furnished with an extension handle.) I eagerly waited for my first swarm. It came at last, and was successfully hived by the aid of a neighbor's boy, and *in spite of the swarm catcher*—not by means of it. I may say here that I never used it again. It is for sale at reduced rates. With what elation did I discover the handsome queen and place her in the hive. In a moment the grand march had begun. I had read a description of this, but to see them like a broad golden-brown stream, pouring *up* into the hive, gave me a thrill of satisfaction. I had but one more swarm, and I divided one as an experiment; so from seven stands, I now have ten, all apparently in good condition.

I wear gloves, for I am still a little afraid of stirring the bees up; yet when I get stung, as I have a few times, I

cannot help admiring the heroic act, since I have accepted the popular belief that the bee realizes that death is the price of the sting, and freely gives its life to save the colony loss or harm. A feminine Leonidas, if you please.

The *system* with which they work; the persevering, busy, and happy (happy *because busy*) spirit; these are but suggestions of what I have learned in one year out in the corner of the orchard where my honey bees dwell.

Manhattan, Kansas.

### THE LEAHY MANUFACTURING COMPANY.

#### Something Concerning its Management and Principal Members.

WILL WARD MITCHELL.

To the bee-keeping fraternity, that vast army of busy men and women, the name, "Leahy Manufacturing Company," has become familiar as a household word, and is synonymous for pluck, patience and perseverance, three of the elements which steadily and persistently brought into requisition, have served to bring this firm to the position it occupies today—the leading supply dealers of the west, and, in fact, one of the best-known companies in the United States.

"There is no excellence without great labor," says an old writer, and he "built better than he knew" when he said it, and "in the lexicon of youth, which fate reserves for a bright young manhood, there is no such word as fail." Thus wrote the great Richelieu, and the words lose none of their truth and force with time. And to the indefatigable energy, resolute endeavor, untiring, unflinching purpose, and exalted aim, of one man, the success at-

tained by this company is, in a large measure, attributable.

Mr. R. B. Leahy, treasurer and manager of the Leahy Manufacturing Company, was born in New York state, and started in Higginsville, Mo., in 1883, the nucleus of this business, with a foot-power saw. In 1888, Mr. E. B. Gladish came in as a partner. At that time they rented a room over a machine shop. The same year they employed J. W. Ennis, then a boy of sixteen years, to assist them in their work.



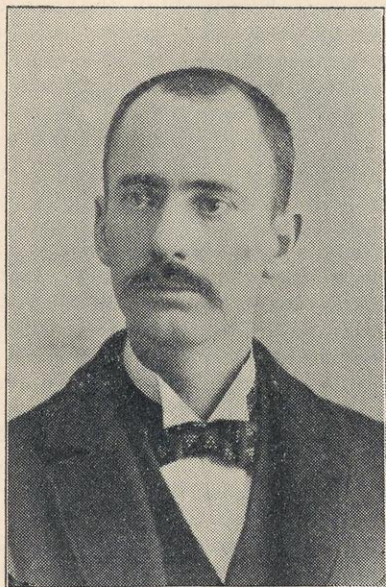
R. B. LEAHY.

Mr. Leahy is a busy man. Upon him rest the responsibility and care of the business. He answers all correspondence, dictates all letters that go out—nearly ten thousand a year—and attends to other work of that class; oversees everything in general; edits the PROGRESSIVE BEE-KEEPER; looks after the tin shop and printing-office, and, unlike the famous Wilkins Micawber, instead of "waiting for something to turn up," gets out and works with a

will, ever finding something to do. He is the first on hand in the morning, and his labors often extend into the "wee, sma' hours" of the next morning, especially in the busy season. I might incidentally mention that he is a lover of good books, an ardent devotee of Dickens, and is withal a man thoroughly conversant with matters pertaining not only to the bee-keeping fraternity, but innumerable other interests, as well. He has traveled extensively, his early boyhood years, till he was twenty-

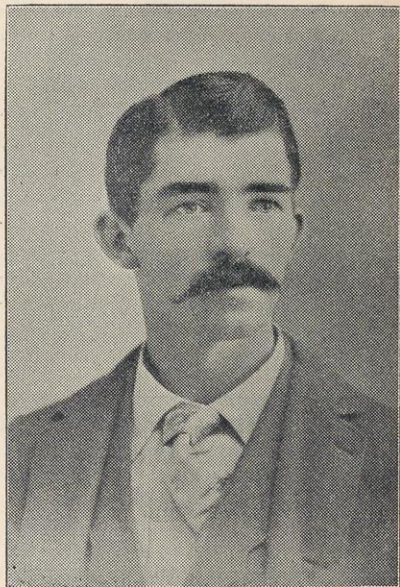
absorbed in business as to be unconscious of, or blind to, the necessities of his fellow-men. Since Mr. Leaby assumed charge of the PROGRESSIVE BEE-KEEPER, it has steadily increased in circulation, and his bee-journal is a something in which he takes pardonable pride.

Mr. E. B. Gladish, secretary of the company, is a Lafayette county boy. He is general superintendent over all the manufacturing of goods, and the machinery. If goods are bad, or poor-



E. B. GLADISH.

one, having been passed on the ocean; and there, perhaps, when the mighty waves dashed against the vessel, the boy was dreaming the dreams and projecting the plans that have since become a reality. A generous, charitable man, one who never turns away empty-handed a deserving, needy brother-man, he enjoys the privilege of knowing that he has done something at least to make sad hearts gladder and humanity better, for he is not so much



J. W. ENNIS.

ly made, he is to blame; if excellent, as they usually are, all credit is due to him. He is a graduate of the Military Academy, Lexington, Mo. He is a kind, social, friendly man, and the boys all like "Ed." as he is familiarly called. He has an interesting family, and no doubt, his oldest son, Clifton Gladish, will some day be known to the bee-keeping fraternity.

Mr. J. W. Ennis came into the employ of the firm about nine years ago.

He was then sixteen years old. His employers appreciated his value, integrity and industry, and his wages were raised from time to time until finally he was induced to take a share in the stock of the company, of which he is now one of the officers. John, who is also a native of Lafayette county, is a hard-working and deserving boy, and has a great many friends. Of good habits, industrious, persevering, and the soul of integrity, it is little wonder his employers set such high store by him. True merit ever deserves reward, and in this instance the axiom has been exemplified. In this may be found a good moral for all young men.

The life and spirit of the company are these three men. Any time one may visit the factory one will find them busy. Thus the future of the firm bids fair to far outstrip its splendid record in the past, and progress ever hurrying onward, finds ever at her elbow, never losing pace with her, this indefatigable firm, the Leahy Manufacturing Company.

Higginsville, Mo.

### LENGTH OF TIME REQUIRED FOR HATCHING QUEEN-BEES' EGGS.

J. W. ROUSE.

I HAVE noticed the discussion in a bee journal of how long it takes to hatch a queen from the egg, and am much surprised at the difference of opinion. That is to say, I do not know why others' experience should be different from my own in doing the same thing, and these, people of large experience.

One thinks it sometimes takes seventeen days to hatch a queen from the egg, and others think it only takes fifteen days, instead of the good old sixteen days, as laid down in the bee books by their authors.

I wish to speak of chicken eggs in hatching. Since the incubator has come into use, it has been found that in some cases chicken eggs may be hatched in a little over eighteen days, and then, again, the time may be lengthened to twenty-four days, when it is well known that the usual time is twenty-one days, and that is the time it takes a hen to hatch the eggs. This time may be shortened a little, and may be lengthened a day or two. In an incubator, with a good, vigorous embryo in the egg, if the heat in the incubator is kept too high, the egg will hatch too soon, that is, too soon to get the best chicks. Then, again, if the embryo does not have good vitality, and the incubator is run with the heat rather low, it sometimes takes twenty-three or twenty-four days to hatch, but the chick is not likely to be of any account.

There is great difference in the vitality of eggs, as procured from chickens, from causes that I do not wish to discuss now. As there is so varied a difference in chicken eggs hatching, I do not see but there may be a difference in bees, or, rather, in a queen bee's eggs in hatching. I think it not likely that there would be the difference in the vitality of a queen bee's eggs as there is in the chicken's eggs, because the cause does not exist to so great an extent in bees as it exists in chickens, but I do think the time may be varied by the care of the bees in hatching the queens out. In my own experience, I do not remember of getting queens to hatch much short of the full sixteen days, but I have had them to go seventeen days, and, in a few instances, a little longer than that, and I always attributed the longer time to my own manipulations, for in cutting out queen cells, I often cage the cells, and place them over the frames of a good colony to hatch; but sometimes I feel certain the heat is not maintained

so well as if the cells were left down in the brood nest. I am aware that queen cells are very often found in the lower edge of the comb, or on the end, and that cells placed on top of the frames, if properly covered, should be in as warm a place as there is in a hive, but I am sure that the conditions are changed, and not as they were in the hive before the cells were removed.

For the very best results, I like to see chicken eggs hatch out during the night of the twentieth day, or very soon on the morning of the twenty-first day. So with queen bees, I believe the most vigorous and best layers should hatch in a little less time than sixteen days. It seems to me that any queen breeder, after hatching out queens for awhile, would soon discover these varying conditions, or at least discover that all queens do not hatch in exactly the same length of time.

Mexico, Mo.

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### SOME QUESTIONS ANSWERED.

E. W. MOORE.

**FRIEND LEAHY**—Please allow me space in the PROGRESSIVE to answer a few questions that are asked of me every few days by readers of the PROGRESSIVE BEE-KEEPER.

First, the prices of bees and queens from my yard. In answer to this question I will say, my lowest prices are given in my 'ad.' in the PROGRESSIVE.

2d, Are Italian bees superior to the common, or black, bees, for the honey producer? Yes, and for many reasons, as they will work when the honey-flow is very light, and make a living, while the black bee will not work unless there is considerable honey in the flowers. The Italian bee is of a more docile disposition, and easier to handle. Besides they are better defenders of their homes, and are not robbed as

easily as their black brothers. They seem to stand the winter better here, and build up strong in the spring before the blacks have hardly commenced brood-rearing. They are also more easily smoked from the combs when taking honey from the hives. Blacks and Italians may be kept in the same yard if you wish, but for my part, I would soon have Italian queens in place of the black ones, and thereby improve my bees, as well as my honey crop.

3d, Which is the best way to arrange hives in the apiary? I must say I do not know as it makes any difference, but my way is to put them in straight rows and three feet apart in the row, and sixteen feet between the rows.

4th, Feed bees at any time that you find they may need feeding; but my advice is that hereafter it would be good policy to attend to this early in the fall before it gets too cold, for I am satisfied that to open and disturb bees in the winter is an injury to them, and should be avoided.

5th, Buy from any reliable dealer in supplies; and now is the time you should get your supplies, and have them ready for the honey harvest, if you wish to make a success in honey production *this season*.

Grayville, Ills.

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### ROSE HILL RAMBLINGS.

OBSERVER.

**M**Y, Oh, my! What a black eye amalgamation got, and the very first round, too. Strange, wasn't it? But "I told you so."

And so we're to have more "jim-cracks" and "fixin's" about our Hoffman frames and a new "Dandy" hive, or is it the "Danzy?" Well, it almost makes one dizzy to keep up with the

procession of new so-called "improvements;" but will we get any more honey? That is the question.

And now we are to have "drawn comb," all made to order, in the sections, just ready for the bees. Now if this were only practical, it would be a boon to bee-keepers, if it could be furnished at a reasonable price; but there is a doubting Thomas in this neck of the woods, and he will believe it when he sees it.

Sommy wants to know what has become of Observer. Thanks, awfully, Sommy. Glad to know someone wants to hear from the old fellow. We would miss you, too, and much more so, Sommy, if you were to "step down and out," which we trust will not happen for lo! these many years to come. We are still on deck, "right side up with care," especially "care," and keeping a sharp lookout at the caperings and cavortings and goings on in Bee-dom, and in time we will let you know what we have "read between the lines."

What has become of Skylark? Did someone "wing him" while he was soaring so high over all our heads? "Want to know, you know."

And now we have a "Ridge Pole" writer. Well, well! We never thought one of the fraternity would have to "take to the roof" to be heard, and we are just "Aikin" to hear what he has to say.

"Progressive" is the word sure enough, is what this Observer chuckled to himself when he saw the name of Doolittle (what a "misfit" of a name!) at the head of the editorial column, and most heartily do we congratulate the readers of this journal on what is in store for them in the way of practical information, from a practical man, on practical bee-keeping. But, Friend D., let us whisper a word in your ear: Don't deal in homeopathic doses.

What has become of one "Heddon," erstwhile a bright and shining light in the ranks of practical bee-keeping? Has he turned cynic, recluse, hermit, misanthrope, or what? We are pining to bask in the light of your countenance, "Brer. Jeems." Let us hear from you; especially on PATENTS.

Rose Hill, February, 1897.

### STRAWS FROM THE APIARY.

FRED S. THORINGTON.

ON January the 20th, the snow was falling thick and fast; it being the first of the season that amounted to much, it made me think how nicely and completely it covered up the fallen leaves and nature's dead. Then, too, the trees of the forest, orchard and yard, were thickly covered with a snow white mantle, for a time holding from our view the tiny buds that fold within their bosom, the mystery and beauty of the resurrection of all plant life, which will spring into beauty and splendor with the returning spring. Then, too, the little bees are shut within the hive in that state of quietude so needful to their health and happiness at this time of year.

I think G. M. Doolittle's experience with the syrup and the bees, while trying to discover a syrup that would not crystalize, resulted in much good to all the bee-keepers, though it was rather trying to him and hard on the bees. His experiments seem to be fruitful of much good. For many years it has been my pleasure to read and profit by his well written articles. I well remember of reading in a journal several years ago, someone saying (and I think it was Dr. C. C. Miller, in *Gleanings in Bee-Culture*.) His name ought to be changed to "Do-much." But I think he has done much good for bee-keepers without changing his name, and I am

very glad to know that ye editor has had the good luck to get him to help edit the PROGRESSIVE.

It seems to me the January number of the PROGRESSIVE was the neatest of any yet received. Its cover was so bright and attractive, and its articles were fully up with the times. Truly, it is as its name indicates, progressive, and should be in the hands of every beginner in bee culture. It is true we find some things written in it that does not pertain strictly to the bee industry, but as Sommy says, I have found out that there are a few things of interest in this world other than the bee industry. While the right man in the right place under the most favorable conditions would make bee-keeping pay as a specialty, yet these conditions are rarely found, and many of us that love our little pets, the bees, are often obliged to look to some other industry for some of the ever needful. But I don't know but what bee-keeping, intelligently pursued, will bring in as good returns for the money invested, as any other industries, especially in the rural districts. The honey crop is sometimes a failure, and so are the various crops of the farmer, as I think the past 4 or 5 poor seasons has well proven. Then, too, the stock men, the swine raiser and the shepherd, often meet with great losses, as well as many other industries too numerous to mention.

I see Little Bee came forth from his hive at the close of a cold spell in January, and very cleverly set down on the invalid bee-keeper, and proceeded in a very quaint way to give the ladies a lecture on bee-keeping. He thinks there are other occupations more fitted for ladies, while Mrs. Jennie Atchley wrote in an article to the Rural World a few weews since, under the title of bee-keeping for ladies. There are a great many ladies scattered all over our land that would be glad if they had some pleasant and profitable light business to en-

gage in for the benefit of their health. I would name bee-keeping as one of those occupations, as it is light, and one can have the benefit of pure air and out-door exercise so necessary to the upbuilding of health. Now which of those two great practical bee-keepers are right? I think bee-keeping, like most any other occupation, has its sunshine and shade, very much like a high mountain in a sunshiny day. At no time during the day does the sun shine all around the mountain at the same time, but to the opposite side from where the sun shines, we can find the deep shade. I expect the ladies enjoyed the Little Bee's lecture hugely, but it was rather hard on the invalid. I know of one invalid in a very strict sense of the word, that in the past four or five poor seasons has kept a portion of his bees and obtained a little surplus honey each season, while several able-bodied bee-keepers around him lost all the bees they had through neglect in keeping them in a slipshod way. Was our lamented and departed friend, Rev. L. L. Langstroth, always an able-bodied man? What would we have done without a Langstroth? I believe after he was 20 years of age, Mr. Langstroth at times, (sometimes covering a period of a year or more) was a great sufferer, and during such times he was unable to write or even converse.

Tell me not, Oh, little bee,

That the invalid has no show,

To keep our pets, the honey-bee,

Where sweet scented clovers grow,

and other nectar yielding plants too numerous to mention.

In the January number on page 13, where it reads, (has put on two combs at a time), should have read, (put in one or two combs at a time). The idea I wished conveyed, was not to put in too many at a time as to discourage the bees in their work of cleaning combs. It is best to put them in among the brood.

Chillicothe, Mo.

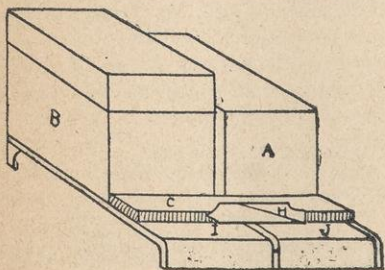


## PREVENTION OF SWARMING IN WORK- ING FOR COMB HONEY.

F. L. THOMPSON.

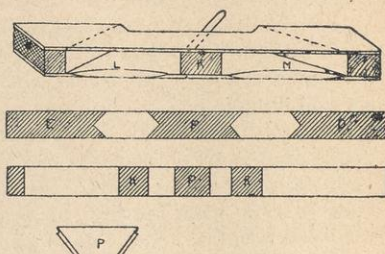
IN 1895 the device described below was used by the Rauchfuss Bros., of this state, on twenty-six colonies run for comb honey in an out-apiary, visited at intervals of eleven or twelve days. It was a perfect success in every way. The colonies so treated did not swarm, and Mr. H. Rauchfuss is positive they yielded more surplus than could have been obtained by other methods. The principle of the device is to prevent swarming by forming an artificial swarm out of the whole colony, brood and all, and part of this work is done automatically.

The device ought to be applied to the hives a month or so before using, so that the bees may become accustomed to it; or, if the bees were just moved to a new location, the device succeeds just as well by being used a day or two after applying to the hives. This was what was done in the case of the out-apiary referred to.



Two hives are placed close together, so that their fronts will be even, and the tops of the alighting-boards on the same level. One of these hives contains the colonies to be operated upon; the other is empty, for the reception of the swarm. (As the Rauchfuss Bros. only use starters in the frames, usually,

to hive swarms, I can only speak of this way of doing. No doubt analogous results would be attained by using full sheets, or, under certain circumstances, drawn combs). The device is then placed in position, so as to fit the fronts of both hives snugly, and left until using. Meanwhile, the tongue, H, is turned so as to cover up the passage into the empty hive, B; or, it will do as well to have it stick straight out in front, if fastened by a nail or something so that it will not accidentally close the passage into hive A.



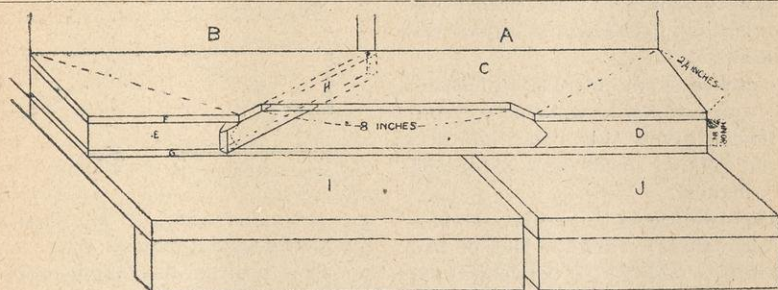
[Rear view of device. K, a piece of thin stuff to close up the space between the rear of the two hives; L, M, bevelled edges at the rear of the bottom of the device to admit the bees into the hive entrances, turning the bees of two weak colonies into one hive between them. A new piece, P, occupies a position opposite the center of the middle hive].

When the time comes for using (the beginning of the flow), only medium or strong colonies being chosen for the operation, the comb of A, on which the queen is, is hunted up, and set in hive B, bees, queen, and all, on the side next A. A super of sections is then placed on hive B, and the tongue, H, of the device moved to close the passage into hive A. It does not entirely close it, as will be seen from the figure, since a little notch large enough for a couple of bees to go through in one of the end blocks, makes a hole when the tongue is shifted; but the projecting end of the tongue hides this hole so it is not readily apparent. The returning bees now find nothing different in the

external surroundings; they fly into the same aperture they have hitherto been accustomed to, and from this point the passage into the new hive, B, is not nearly so different in direction as it would be if the whole front of the device was open, instead of eight inches of it, so as to make the tongue swing farther around than it does. At any rate, practice shows that in every case the bees take kindly to their new quarters, and it seems to suit them. They find their queen there, with some brood, and they at once begin comb-building, at exactly the same time both above and below. In three or four days, or when the queen begins to lay in the new comb, the old comb is set back in hive A, where it was taken

used (being only adapted to fairly strong colonies) on account of the disastrous spring dwindling around Denver. In 1893 and 1894, it was used like the Langdon device, on two full colonies at a time. Used in that way it did not prevent swarming altogether. The bees in the depleted colony would sometimes start queen cells and when the time came for the tongue to be shifted again (at intervals of six or seven days, as in the Langdon device) they would be just ready to hatch. But in most cases the queen cells were destroyed. In the Review of October 1893, pages 291 and 292, this use of the device is referred to.

The same article in the Review suggested the use of the device for curing foul brood, thus antedating the publish-



[A, Hive with bees in; B, Hive with empty frames with starters, and a super of sections; I, J, alighting boards; C, non-swarming device; E, D, triangular blocks of  $\frac{3}{4}$  or inch lumber; F, G, top and bottom of device, made of any thin stuff; H, tongue, moving on a pivot at the rear of the device].

from. The bees are now safe from swarming for three weeks from the time they were shifted. If the flow continues, the operation may then be repeated.

In the trial of the device mentioned, all of the old hives were removed at the end of three weeks. Virgin queens were found in a few of them. Had they flown out to mate, and returned, it is reasonable to suppose they would have returned to the hive where most of the bees were, and perhaps suppressed the old queens.

Last year the device could not be

ing of the Baldrige method. In 1895 this idea was carried out. Four of the twenty-six colonies referred to were infected with foul brood. These were treated just the same way as the others, except that instead of putting a comb in the new hive, the queen only was transferred, caged for a few days. After all the bees had left the old hives, the latter were disinfected by being burnt out with gasoline, the old combs melted up, etc. The bees in the new hives remained entirely, free from the disease. Mr. H. Rauchfuss considers this the best possible way of curing foul

brood.

It is obvious that the device would be very useful in transferring from box hives, by first securing the queen by drumming or otherwise

By shifting the tongue just half way so that access to both hives is equally free, at a time when there are just enough bees left in the old colony to build up to a full colony by fall, it may also be made a method of increase.

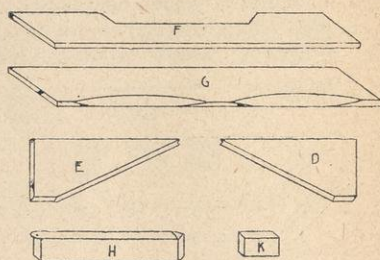
It should be mentioned that in 1895, when the summer was exceptionally cold, it was found necessary, in a few colonies, to shift the tongue in such a manner as to secure some bees back again in the old colony until the brood had hatched out to avoid chilling the brood. But Mr. Rauchfuss thinks that in ordinary summers this precaution would not be necessary in any of the colonies.

The device is not entirely automatic; it needs an intelligent apiarist to control it; but given this condition, it is believed to be a great time-saver and money-maker.

In 1895 twenty-six three-hive devices were also tried, to turn the bees of two hives into an empty hive between them furnished with a partition in the center an excluder and the supers. This plan was not a success, and the reason will be found instructive. The bees simply clustered in great masses, and refused to work, in the height of the honey-flow. There were evidently too many bees, and too many *young* bees; for in throwing the bees of two colonies together and unqueening at the same time, this trouble is not observed. But this objection would not apply to two weak colonies, which, Mr. Rauchfuss thinks, could by means of a three-hive device, be made to yield a surplus.

The device is not patented. In making it, the dimensions given will be found essential to success, having been selected as the result of experience. The inner height or depth of the de-

vice, should be about an inch, when it is  $1\frac{1}{2}$  inches, too much light enters and it does not work; too many bees are left in the old hive. For the same reason the external aperture should not exceed 8 inches in breadth and the top should not consist of two pieces (such as laths) as they will shrink and let the light through. The device should have its own bottom, because if the alighting-boards of the hives were used for the flow of the passage-ways, differences in appearances, such as exist more or less between the bottom-boards of any two different hives, would interfere with



success. The tongue, H, should be pivoted in such a manner that no matter what position the tongue takes, no bee can get between it and the slip K, which is about 1 inch high and  $1\frac{1}{2}$  inches long.

The width of the device should be about  $2\frac{1}{4}$  inches. Of course no cracks should be allowed in the hives. The tongue should be of such a length as to project enough to hide the notches in the end-blocks, when shifted against them, from the line of vision of a person standing in front of the hives. An inset of about half an inch, (8 inches long) is made in the top piece, where the aperture comes, so that the returning bees find it handier to drop down right on the threshold, so to speak of the device.

It may interest the readers of the PROGRESSIVE to see the yield of thirteen bee-keeping counties for 1896.

About ten other counties, some of them important, have not yet reported. Montezuma, (only about 500 colonies in the county) 104 pounds average comb; 201½ pounds average extracted. Otero, sixty pounds average, (presumably comb mainly, as also the others which follow). Chaffier, ten; Fremont, almost none; Montrose, forty; Morgan, twenty; Pueblo, twenty; Huesfano, six; Arapahoe, fifteen; Mesa, forty; Boulder, fifteen; Weld, fifteen; Las Animas, thirty. You will see that the southern and southwestern counties have done pretty well, and the northern ones very poorly.

Denver, Colo.

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### FULL SECTIONS.

O. P. MILLER.

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WHILE out in the honey house this morning fitting up a case of comb honey. I was thinking over the matter of comb honey production and the crating and sale of the same. After I was done I came into the house and fixed the rocking chair, (as I am suffering with a very lame back), and picked up the PROGRESSIVE, and the first article that called my particular attention, was by Somnambulist, and the first thing in this article that interested me was (size and shape of sections) by Mr. Hutchason. Under this head comes just what interests me, as well as the retailer and consumer, if they are posted, and they soon will be, if they are not; at least that is the way it is in Iowa.

The retailer knows just as well when he sees a nice full section and one that comes near or quite weighing a pound as anyone does, and the buyer will soon learn that you are selling him ¾ of a pound of honey for a full pound, although you may not say this is a pound, but we all call them pound sections. Just as well tell a fib out as to leave an

impression that is one. And you can't fool an Iowa woman (at least) on a large surface, make her believe there is lots of honey where there is not. No, sir, they are too smart for that. Then besides it is not, strictly speaking, honest, and of all men and women on earth, the bee-keeper, ought to be honest, and it will pay him in dollars and cents; besides he will have no remorse of conscience, because he knows he has not sold a part of a pound of honey for a whole pound, and that no one has given him ten cents for seven cents worth of honey. There is another mistake right in this article according to my experience, (which of course don't cut any figure alongside of the veterans), that is, that thin sections are more rapidly produced. In a modified sense, that may be so. I can not say, inasmuch as they contain less honey, and, consequently, less wax and less labor, but I will venture the assertion that they won't make any more pounds of honey in 7 to the foot or 8 to the foot than they will in 1½ or 2 inch sections.

So far as I have gone, I have never had any trouble in crating 2 inch or 1½ sections, and I have never used separators. Then, it is (to me) a source of pleasure to offer a section good and full to one of my customers, and hear him say, "a Mr. ——— was here the other day with some honey, but his sections did not look nice and full as these do, and I thought I would wait until you come around."

This is what I am working for, and think there is nothing wrong in an honest competition for trade.

Glendon, Iowa.

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### THE MATING OF QUEENS—HOW IT MAY BE CONTROLLED.

L. A. ASPINWALL.

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Bee-Keepers' Review.

IN most lines of progress, we find, with the advantage gained a corresponding evil presents itself. This

became apparent upon the introduction of improved bees, notably the Italians. Notwithstanding their recognized superiority over the black or brown bees, the difficulty of maintaining them in their purity has been and is still a great impediment to profitable bee-keeping; so much so, that many have abandoned them, accepting as a natural result, the hybrids, or, more properly speaking, a mongrel or cross with the blacks.

To maintain an Italian apiary, unless all other varieties are removed for several miles, requires constant vigilance as well as the exercise of scrutinizing judgment. Not infrequently, a few colonies of black bees in the neighborhood of an Italian apiary, will, after two or three years, become dominant in Italian blood. The owners of such, being unlettered in bee-culture, often express themselves as possessing Italian stock.

At this juncture the difficulty of maintaining absolute purity is much increased. As an illustration, we have a queen which becomes mated with a drone from this mongrel stock, which is possibly three-quarters or seven-eighths Italian, or one which shows but a trace of dark blood. As a result, her progeny is well-marked, and to the casual observer would be accepted as pure. But, upon close examination, possibly one bee in fifty, or a hundred, will show but a slight proportion of yellow upon the third abdominal ring. Should the bee-keeper fail to recognize this taint of dark blood in the young queen's progeny; a succeeding generation would bring drones into requisition which would contaminate the Italian stock to a great extent, yet almost imperceptibly; especially if the law of atavism, (a recurrence to the original type) is displayed on the Italian side. According to my judgment there is much impurity of this kind throughout the land.

I had an illustration quite similar the past season. A young queen proved to

be mismated. After destroying her, I gave the nucleus colony a cell which, after a time, I found was destroyed. In the meantime business matters caused me to neglect the colony, during which time they reared a queen from the larvae of the mismated queen, which in due time mated with an Italian drone. When her progeny began to appear, to my surprise, it was most perfect and beautiful in its marking. Among my mismated queens the past season, several from the yellow stock show but a few dark bees—possibly one in thirty or forty.

This recurrence to an original type is greater in its tendency with golden Italians crossed with Carniolans than Italians and blacks. The logical conclusion would be, that either the golden Italians or Carniolans, or both, were not sufficiently thoroughbred to belong to a fixed type. A thorough knowledge as to the stock these varieties were bred from would tend to explain this tendency. However, we have the evil of intermixing to contend with, and though we may be able, among the possibilities of the future to control the mating of queens sufficiently to secure mostly pure stock.

Its desirability is evinced by the numerous efforts which have been made to accomplish it. The principle upon which most experimenters have worked, has been to limit the flight of the queen and drones to small areas by enclosure made of wire cloth. Such varying in size from two or three feet square to ten or fifteen feet. It is evident that any or all enclosures will intercept the flight of both queen and drones to an extent which would thwart the intended purpose. Even if success could be attained, the expense of such enclosure in sufficient numbers for a large apiary would more than counterbalance the advantage gained. So thoroughly have I been impressed with the impossibility of success by such methods, that I never

attempted it. However, I believe in a method which shall limit the flight of the queen, but not to the prescribed lines of enclosures, and which shall be quite inexpensive. I have experimented with a considerable degree of success the past four or five years upon a method which has partly limited the flight of the queen. Whether mating at a distance of several miles is due to flight of the queen or drones or both is as yet unsettled in my mind; however, I am inclined to believe that the queen is prominent in making long distances. In proof, I have marked quite a few drones when leaving the hive and found their return to be much within the average time occupied by queens. Still the drones have wonderful wing power, and possibly make equal distances with queens in less time.

The method I have practiced is no less than clipping about  $\frac{1}{16}$  of an inch from the virgin queen's wings a day or two after emerging from the cell. As a result less than half as many proved to be mismated compared with an equal number of those not clipped. Clipping certainly lessens the wing power of the queen, and, in consequence places a limit upon the time and distance of her flight. It will be observed that such a limit naturally confines the queen more within a home radius, or circle of the home drones.


My first experiments were attended with considerable doubt as to whether the queens would still retain sufficient wing power to successfully mate with the drones, but the uniform success attending the experiments led me to clip as much as  $\frac{1}{8}$  of an inch from two or three with equally good results the past season. Just how much can be clipped from the wings, and still retain sufficient wing power to accomplish successful mating, is yet to be determined. Whether clipping a hundred or more select drones will be profitable is questionable. In lines of progress the unexpected usually occurs on the successful side. As yet, so little is known about the flight of queens and drones that it is impossible to determine with-

out experiments in clipping of both. Possibly the clipping of both queens and drones would result in their occupying a lower altitude in flight, insuring a still less number of mismated queens. On the contrary, the drones might be so weakened in their power of chasing flight as to be useless. Certainly if the object can be accomplished by clipping the queens only, it will involve but little trouble and expense.

It should be understood that success attendant upon clipping is contingent upon having none but pure drones in the apiary containing the young queens, also that the amount clipped from each wing be uniform, otherwise with a lack of balancing power they are sure to be lost.

I am so well satisfied with past results that I expect to clip all my young queens the coming season.

Jackson, Mich. Jan. 18, 1897.



How to manage bees? Send for our 36 p. -e. Illustrated Catalog - It tells you all about hives, fixtures, sections, bees, queens, etc. The best and cheapest goods - JOHN NEBEL & SON, HIGH HILL, MO.

P S A I ROOT CO.'S. GOODS KEPT 'IN STOCK

### FOR SALE CHEAP!

One 6-inch Root Foundation Mill, practically new, was used but a few hours. Price \$11.00.  
LEAHY MFG. CO., Higginville, Mo.

## Editorial.

### 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

How do you like the PROGRESSIVE?

—:0:—

If you like the PROGRESSIVE, we would like to exchange it with you one year for 50c. Just think! A real good bee paper one year for only 50c. Now could we exchange?

We notice that we are selling more foundation than usual for this time of the year. I do not know whether it is because it is better than usual, or that the demand is greater. Suspect both has something to do with it.

:O:

We have added to our stock of smokers the following:

Bingham "Smoke Engine".....	\$.125
By mail.....	1.50
Bingham "Plain" Smoker.....	.55
By mail.....	.80

This "SMOKE ENGINE" is a new product of Mr. Bingham's. It has a four inch fire box and is the largest and best smoker made.

:O:

Am I to understand that "Somnambulist" would kill off the adulteration of extracted honey by the cheapening of comb honey, made possible by the wholesale adulteration of the luscious *comb* honey? This reminds me that Sommy asked who there would be now to find fault with him since Friend Miller had left our ranks, and predicted that the task would fall upon ye editor. Now, Sommy, I don't want any quarrel with you; you know that; but if I hear of any more such doings, I will quarrel with you. Right hard, too.

:O:

We call attention to an advertisement of Cream and No. 2 sections in another column. These sections are a bargain for those who can use them. The following is what one of our customers has to say, who has received several thousand of them:

Leahy Mfg. Co., Higginsville, Mo.

Goods, as far as examined, are first-class, and I believe it would be to the advantage of some other bee-keepers to take advantage of your *cut* on "cream" sections, as they are as good, if not better, than some that have cost me much more. Thanks for promptness in filling order. Yours truly,

Humansville, Mo, GEO. W. WILLIAMS.

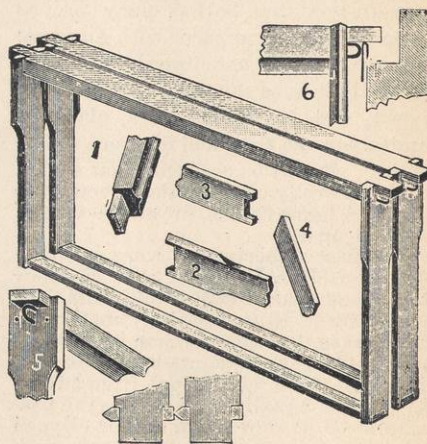
:O:

I notice on page 4 of the Root & Co's. catalogue, in explaining their improvement (as they call it), on the HIGGINS-

VILLE hive cover, they claim that this cover has been made the SUBJECT of a patent. If DANZY will read what Mr. W. H. Ritter has to say on page 78, March 1895 PROGRESSIVE BEE-KEEPER and will then consider how nice his hives look with the HIGGINSVILLE cover on them—. DANZY, you are welcome to use the HIGGINSVILLE cover, also Mr. Ritter's idea, which has been given to the public over two years ago, but don't talk about a patent, for you will not get it. DANZY, you are ROOTING on the surface. Better change the *subject*.

:O:

We notice in February Gleanings a description of the Hoffman frame with sawed off top bars and staple spacers on the end. Neither of these ideas are new, as parties have used such as long ago as 1865, but we believe there are a few who would like something of this kind, and we herewith show an illustration of the frame.



The cutting off of the top bar adds nothing to the cost of the frame, and the staples cost five cents per hundred frames. The only thing I dislike about this move is, that if you cut off the top bars and you should not like them, you will have to stand it. Hence my advice is to try only a few at first.

## WHITHER ARE WE DRIFTING?

With reference to an artificial comb, that is now being pushed to the front by its manufacturers and a few enthusiasts on what they call progress, Mr. Hutchinson, in the last Review, gives some very sound advice, and sounds a timely warning, which should be endorsed by every honest person and heeded by every bee-keeper in this broad land. The following is what Mr. Hutchinson has to say:

"We all know that the eating quality of comb honey has not been *improved* by the use of comb foundation—such has been the complaint about the "fishbone" in comb honey. Comb, natural comb, is of a light friable nature—like the feathery, new-fallen snow. Once this snow has been *melted* it can never be restored to its former state. It may be frozen again, but it will be hard and solid; it will be ice. Of course, Nature can evaporate the water, and form it into snow again, but man can not restore it to snow. In a like manner, once comb has been melted into wax its character is changed. It is no longer comb, but *wax*. Another simile has been used by Mr. Bingham, viz., that "butter is butter, but melted butter is grease; so comb is comb, but melted comb is *wax*." Comb foundation of the lightest, most fragile type is bad enough; foundation walls one-half inch deep will be an *abomination*. Unless I am greatly mistaken it will be as great a blow to the sale of comb honey as has adulteration to the extracted-honey market. At least, let us try this thing most *cautious'y*. I fear, too, that unscrupulous men would use this product even if it did injure comb honey. Let us be careful what we do in this line.

I would not assert that artificial comb could not be made having walls as thin as those of natural comb, but they would still be of *wax*; and comb honey having such a product as its base would be little else than honey "done up" in tough, leathery, "gobby" wax—not comb honey with its delicious, fragile, toothsome, flaky comb."

I fully endorse all the above. What is beeswax anyway? Bee comb melted up, to be sure, but how, when, and where? Here I wish to give a little history on the accumulation of beeswax: To begin with, a large portion of this is imported from foreign lands, and a large part of this imported wax has had the honey chewed and sucked out of it by the people of said foreign lands. Now would it be Christian-like to dish out this wax in overdoses in the shape of manufactured comb for the American

people to chew and suck the honey out of again? Now please don't say this foreign wax should not be used in the manufacture of this comb, and thus evade the filthy stuff, for our home product is no cleaner. If you doubt my word, go to the commercial centers and call on a dealer who deals in hides, tallow and beeswax, and there you will find a stench that would almost knock a mule down. You will find the tallow that has been rendered from animals which have died from disease, along in the barrels and sacks with beeswax. Wax that comes from these commercial centers, has a lot of this filthy grease adhering to it. When this wax is melted, this filthy grease that adheres to it while coming in contact with sheep pelts that have been skinned from the bodies of sheep that have died of disease, and the filthy tallow and soap grease aforementioned, will become a part of it. Not to mention all the above, how many bee-keepers are there who will read this article that have not seen bits of bee comb chewed in his presence and spat out in the extractor, or some receptacle for holding such bits of comb until it could be rendered?

Some years ago, I was greatly annoyed in the wax-room by the boys biting pieces off of nice cakes of wax, and chewing it in this way. Sometimes they would throw this chewed mass back among the scraps; other times they would throw it on the floor to adhere to the heel of somebody's shoe. I finally thought of a plan to put a stop to this nuisance. I do it in this way. When I see any of them chewing wax now, I ask them how many people they think chewed that wax before they did. This is sufficient. The wax is spit out, and the mouth wiped. Is it not enough to use a starter for which comb foundation was originally intended, to guide the bees that we might have a commer-



cial article of comb honey, and in such shape that it can be safely and conveniently shipped. Is it not enough that this starter has been stretched to the bottom of the honey box, by some bee-keepers who would give us *chewed wax* to be chewed again? Is it not enough that some have taken light brood foundation that doesn't weigh more than half as much as this artificial comb does, and pushed it under the guise of comb manufactured by the bees, on a suffering public? Must they still further be imposed upon by manufacturers and dealers, who would accumulate wealth and prostitute the teachings of the Bible, by adulterating that which is spoken of as *sweeter than honey*. Oh, but they say, it contains no more wax than the thinnest of foundation of the present day. I have before me a sample of this luscious comb, the side-walls of which are a quarter of an inch from the base. I also have a piece of thin and extra thin foundation. The sizes of all three of these pieces are  $3\frac{3}{4}$  inches long, the width is  $1\frac{1}{4}$  inches. The artificial comb weighs 77 grains, the thin 32 grains; (note, less than half), and the extra thin 27 grains, a little more than one-third. It is also claimed that this will be no more expensive than comb foundation. This looks fishy to me, as if it is made of pure beeswax it weighs nearly three times as much as extra thin foundation, and over twice as much as thin. Hence, the wax it contains alone, not counting cost of manufacture, (if it is pure beeswax) would cost twice as much as our present foundation costs, or about one cent a section more. Some claim it will cheapen our comb honey, and will enable us to produce it so cheap as to knock out the adulterators of extracted honey. Heaven help us! Must (because unscrupulous parties have ruined our extracted honey) we adulterate comb honey, so to speak, and commit another sin? I say NO. How much of a help do you think it would be to

the sale of comb honey to have this kind of a label on it?

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**THIS HONEY IS**  
**PURE NECTAR**  
 As gathered by the bees from white clover put up in comb  
 Manufactured by  
**Wee-din.**

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Now, haven't you all claimed that the adulterators of extracted honey should put the contents of the package on their label. Haven't you been wanting to raise funds for the prosecution of those who did not, and to enact laws to compel them to properly label their products? Are we any more privileged, as bee-keepers, than they? I say NO. Believing this artificial comb to be of no benefit, save to those who control the manufacture of it; believing it to be of no benefit to bee-keepers for the production of cheaper honey, and for marketing of the same; believing that it will sound the death knell of comb-honey, and obliterate it from the high place of which it is held as a luxury, as the king of sweets, and the luxury of all luxuries; believing it is only one step more toward the abuses which comb honey will be subject to, by deeper and completer combs in the future, until it is possible that bees will not be needed at all. I wish here most solemnly to call a halt, and pledge myself to use all honorable means to defeat the adulteration of what is commonly known as comb honey. Another thing detrimental to this project is that this artificial comb is flat-bottomed. Yet I find some men who have been abusing flat-bottom foundation now clamoring for this product, because they think they can get more honey done up this way than by the old method, and make more money. What matters it? "*What shall it profit a man if he gains the whole world and lose his own soul?*" R. B. L.

:O:

**A Pleasant Winter.**—Our winter has been very pleasant as a whole, with little snow and but little extreme, or below zero weather. Bees seem to be wintering well, both indoor and out. I have 114 in the cellar and 25 on summer stands.

**Advice to Beginners.**—I am about to commence in bee-keeping. How many colonies would it be best for me to start with? The above is the substance of many letters which I receive. I would advise a new beginner to commence with a small number of colonies, say from two to five; as however well he may study and understand the theory of bee-keeping, he will find that practical experience is necessary, and the knowledge he will obtain in handling a small number of colonies and multiplying them, will give him the requisite experience to manage them when his colonies become numerous. If he makes blunders with a few, before he becomes expert, the loss will not be so great; when if he should commit the same blunders with a great number, it might prove too costly a tuition fee to pay for the experience acquired, and turn him from the pursuit in disgust.

—:O:—

**Intelligence in Bees.**—Noticing an item in one of the papers trying to prove that bees were intelligent creatures and reasoned, I am led to say that bees have the same habits now that they had at their creation, as permanent and unvarying as the attraction of gravitation or any law of nature. They still always act alike under like circumstances. They are incapable of education. They learn nothing. By taking advantage of these habits, we can control their actions and make them subservient to us, just as we take advantage of any law of nature, and by proper machinery and manipulation cause them to produce desired results. If bees possessed the intelligence of the higher order of animals, and could learn tricks like dogs and horses, we could not manipulate them as we do now, and they would become a curse instead of a blessing.

—:O:—

**Foul Brood.**—I wonder how many of the readers of the PROGRESSIVE

take the American Bee Journal and Gleanings. Then I wonder how many read Mr. Cowan on "Foul Brood," on page 50 of A. B. J., and Mr. Holtermann on the same subject, on page 96 of Gleanings, (both for this year), together with the comments of the editor of Gleanings, on both. And the surprise is that the editor of Gleanings apparently agrees with both. Mr. Cowan says, if I read him right, that while foul brood bacilli, at the temperature of boiling water, are destroyed, the SPORES, the real seed which produces foul brood, apparently suffer no damage at that temperature, but will retain the power of germinating into bacilli, or foul brood, after they have been subjected to boiling water. Mr. Holtermann has proven, through experiments carried on by the Ontario government, that the low heat required to melt wax is amply sufficient to purify the worst foul brood combs possible to be obtained, so that no spores are capable of germinating from wax thus rendered; and as I said before, the strange part is that Editor Root endorses both statements, as correct. It would be interesting to have Brother Root explain how a temperature of 142, (the point at which wax melts) will kill foul brood SPORES in Canada, where Mr. Holtermann lives, while a temperature of 212, (the point at which water boils), will not damage such spores, in the least, in England, where Mr. Cowan resides. There is something wrong somewhere, and as my experiments in 1872-3, when I cured my apiary of foul brood so that it has remained cured ever since, proved that boiling water would destroy every vestige of foul brood, and as hundreds of others have proven the same things, I am compelled to believe that Mr. Cowan, with all his high research, must have made a mistake.

—:O:—

**Take a Peep at the Bees.**—Going into the bee cellar yesterday, February

10th, as I do every twenty days, to spread a bag of sawdust on the floor of the cellar to keep everything sweet and clean, I wished that every reader of the PROGRESSIVE could see the bees as I saw them. Thinking a minute, I said, "why not let the reader see them by a word, picture;" and the echo answered, Why not? So I held the candle close up to the two inch space under one of the hives and said, as I always do to any visitor, which I take in the cellar, "There, do you see those yellow beauties hanging down there like a swarm in summer, till they touch the bottom board for a space of six inches in diameter?" Then I heard the reader say, as all visitors do, "yes, I see them, but how still they are. They do not even stir. They are dead, are they not?" "No, they are not dead, and I will show you in a moment that I am right, but first I wish you to notice how the abdomens of the uppermost bees lap down over the head and thorax of those next below, and so on down to the bottom, just as so many rows of shingles would do on a roof; or very similar to what bees appear when a swarm is fully clustered on a limb. Now I will breathe on them a little. See them stir and put out their stings!" "Yes, I see that, but how do they get anything to eat when so still, and hanging down two inches below the combs? Then, is there honey in the combs at the bottom?" "Now you have asked me a question I can not answer, for whenever I come in here the bees are always just so still, and from what I knew of the combs when I placed the bees in the cellar last fall, there was no honey (at that time) nearer the bottom of the combs than four inches, in that part of the combs occupied by the bees. So I should say that it was at least six inches from the lowest bees in the cluster which you see, to the nearest honey, and how they are fed, or how they eat during winter, here in the cellar, has always been a mystery

to me. Writers have told us that every little while those on the outside change places with those on the inside, so as to get food or keep any bee from becoming chilled, but, if this is so, twenty years of careful watching on my part, has failed to reveal such a thing to me. Now look at this one!" "Well, now, that is different! Are not those rows of abdomens sticking down below the bottom bars to the frame, in one, two, three, four and five places between the combs, just handsome? Just see them glisten in the light! If possible that is a more beautiful sight than the other." And so we go on looking at many hives, nearly all being in a condition similar to the two described, and between, some hanging down so that the point of the cluster just touches the bottom board, while others do not come more than half way or one inch down. A very few colonies are so high up among the combs, that the bees are not seen at all at the bottom, but there is not one in ten that do not show bees below the combs. I have given this so that the few readers, who winter bees in the cellar, may know how bees appear when wintering perfectly, and also to show the more southern readers, who never think of putting bees in the cellar during winter, that we have some attractions and pleasures here at the north, (where winter reigns supreme for five months out of the year), which they do not have. Of course, I would prefer the southern wintering, as a whole, but if there is anything that will bring on a "bee fever," going into a bee cellar, as above, will have that effect.

—:O:—

**That Weed Honey Comb.**—I see in the bee papers quite a little about the new Weed comb foundation having side walls half inch in depth, or such a matter. I note that some are opposed to it, on the old line of "fish-bone," that we used to hear so much about

years ago, when comb foundation first came to notice. Now I would like to ask, with all due respect to and for the opinions of others, Is the bee fraternity any better off on account of section foundation? Hands up. How many hands do you see? Why nearly, or quite, everyone. Well, then, I wish to say that this new comb is nearer, very much nearer perfection, for what it is intended, than was the section foundation when first put before the public for what that was intended, if the samples I have are any guidance to go by. I have just made a careful test with a sensitive pair of scales, and I find that there is no more resistance, at the end of a piece wire, in the side walls of the cells in these samples, than there is in the side walls of samples of natural comb that was built during the buck-wheat honey flow last August, and very little more than what there is in the cell walls to comb built during basswood harvest. But I find the sceptorum to this high side wall foundation, or comb, is quite a little thicker, or gives nearly double the resistance that the thin section foundation does and two-thirds more than the sceptorum found in natural comb, built in sections. But when I come to compare this seemingly thick sceptorum with that of the first thin (?) foundation sent out, I find that the first has four times the resistance that has the sceptorum of this new Weed comb. I, for one, have hailed this high cell wall foundation with quite a bit of enthusiasm, and believe that we have arrived at a stage in our pursuit where we as bee-keepers, nor 'unscrupulous men,' will not tolerate any invention as imperfect as was our first efforts at comb foundation. Nor do I believe the Roots will risk their reputation on anything which will injure the honey markets by pushing it to the front. Caution is always in order, but censure should not be used till there is occasion for it.

**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.

- 5,000 4¼x4¼x2 inch No. 2.
- 3,000 4¼x4¼x1 15-16 No. 2.
- 40,000 4¼x4¼x7 to ft. No. 2.
- 3,000 4¼x4¼x8 to ft. 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:

- 49,000 4¼x4¼x7 to ft. Cream.
- 7,000 4¼x4¼x8 to ft. "
- 9,000 4¼x4¼x1 15-16. "

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

We also have the following 1¼ sections:

- 15,000 No. 2 sections 4¼x4¼x1½. Price \$1.65 per 1,000.
- 20,000 No. 1 Cream sections 4-1-4x4-1-4x1½. 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.

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

# 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.

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**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 Higginville, Citizens' Bank of Higginville, or to the postmaster of this city, as to our responsibility, etc.

Smithville, Mo., May 20, 1895.

Colli Company, Higginville, 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, Higginville, 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.

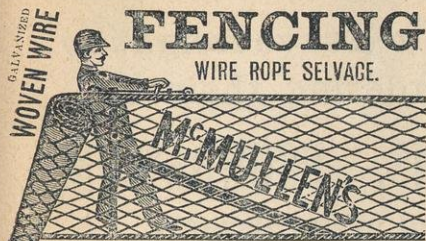
**How to Send money.** Money can be sent at our risk by registered letter, postoffice money order, or bank draft on some commercial center. In no case send local checks. In most cases a dollar can be sent in a letter without registering, but we would not be responsible for any loss thereby.

---

# COLLI - COMPANY....

## Higginville, Mo.

**PLEASE** don't neglect to mention the **PROGRESSIVE BEE KEEPER** when answering these "ads."



**FENCING**  
WIRE ROPE SELVAGE.

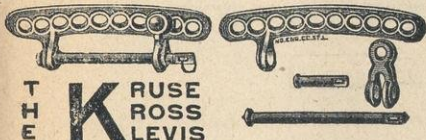
Poultry, Farm, Garden, Cemetery, Lawn, Railroad and Rabbit Fencing.

Thousands of miles in use. Catalogue Free. Freight Paid. Prices Low.

**The McMULLEN WOVEN WIRE FENCE CO.**

114, 116, 118 and 120 N. Market St., CHICAGO, ILL.

Please mention the "Progressive"



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

Address, Mention this paper.

**KRUSE ROSS KLEVIS CO.,**  
**HIGGINSVILLE, MO.**

Please mention the "Progressive."

**Write us**

before you order your **Sections** this season, as we can make it an object for you to buy of us. Our prices will suit you, and we know when you get some of our Sections, you will be more than suited. We have all the up-to-date machinery for manufacturing the **ONE-PIECE SECTION**. We polish them in the highest style of the art. Let us hear from you, one and all.

**Wauzeka Section Co.**

Wauzeka, Crawford Co., Wis., Jan. 15, 1897.

**WANTED!**

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

Address,

**LEAHY MFG. CO., HIGGINSVILLE, MO.**

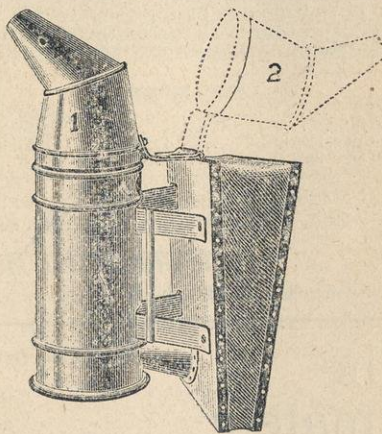


I am now ready to receive orders for May delivery, 1897. Full colonies of three-banded Italian bees in 8-frame dovetailed hives, \$5. Strong three-frame nucleus, with tested queen, \$2.75. Untested Italian queens, each, 75c; per doz., \$7.00. Tested Italian queens, each, \$1.00; per doz., \$10.00. Best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



THE "HIGGINSVILLE SMOKER."

A Good Smoker for a Little Money.

THE HIGGINSVILLE SMOKER A DANDY.

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

Price 75c; by mail, \$1.00. Address,

**LEAHY MFG. CO., HIGGINSVILLE, MO**

“Higginsville Supplies” AT \_\_\_\_\_

Higginsville Prices.

**KANSAS**

people will save freight by  
 ordering their

**BEE HIVES, SECTIONS, FOUNDATION,**

and Everything Needed in the Apiary,

—OF—

**HENRY L. MILLER,**

**315 MINNESOTA AVE.,**

**Kansas City, Kans.**

Write at once for his Illustrated Catalogue.

**4 1-4 SECTIONS.**



Our business is making sections. We are located in the basswood belt of Wisconsin; therefore the material we use can not be better. We have made the following prices:

NO. 1 SNOW WHITE.		NO. 1 CREAM.	
500 @.....	\$1.25	500 @.....	\$1.00
1000 @.....	2.50	1000 @.....	2.00
3000 per 1000 @.....	2.25	3000 per 1000 @.....	1.75
5000 per 1000 @.....	2.00	5000 per 1000 @.....	1.50

If large quantities are wanted, write for prices. Price list of sections, foundation, veils, smokers, zinc, etc., sent on application.

**MARSHFIELD MFG. CO., Marshfield, Wisconsin.**

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

.....675.....  
 .....sold in.....  
 .....1895.....

**LEAHY MFG. CO., Higginsville, Mo.**



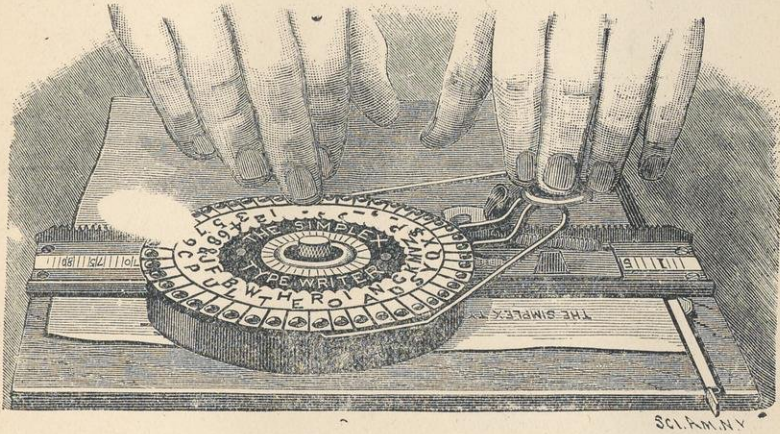
# The Simplex Typewriter.



— *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.** —



THE LATEST OF THE BEST TYPEWRITERS. THE CLIMAX OF IMPROVEMENTS. THE  
MINIMUM OF PRICE. DESTINED TO REVOLUTIONIZE WRITING, AS THE SEW-  
ING-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. CLER-  
GYMEN 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 print-  
ing 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.

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.

1897. **ROOT'S GOODS.** 1897.

Before placing your order for this season, be sure to send for Root's 1897 CATALOG! Our 1897 hives, with improved Danzy cover and improved Hoffman frames, are simply "out of sight." Acknowledged by all who have seen them to be a great improvement over any hive on the market of last year.

**Weed New Process Foundation.**

Cheaper and better than ever; clear as crystal, for you can read your name through it. Process and machinery patented Dec. 8, 1896, and other patents pending. Samples of the new foundation free.

**THE A. I. ROOT CO.,**

Main office and factory **MEDINA, O.**

Branch offices at 118 Michigan St., Chicago; Syracuse, N. Y.; No. 10 Vine St. Philadelphia; St. Paul, Minn.; Mechanic Falls, Me.

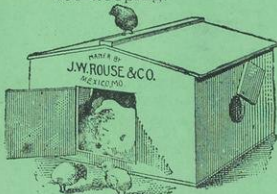
Please mention the "Progressive" in answering this advertisement.

Latest Improved Hives and all kind of

**Apiarian Supplies, Bees & Queens**

**Everything Cheap.**

Send 25c for the Amateur Bee-Keeping. 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.

**J. W. ROUSE & CO.,**

Address,

**MEXICO, MO.**

Please mention the "Progressive" in answering this advertisement