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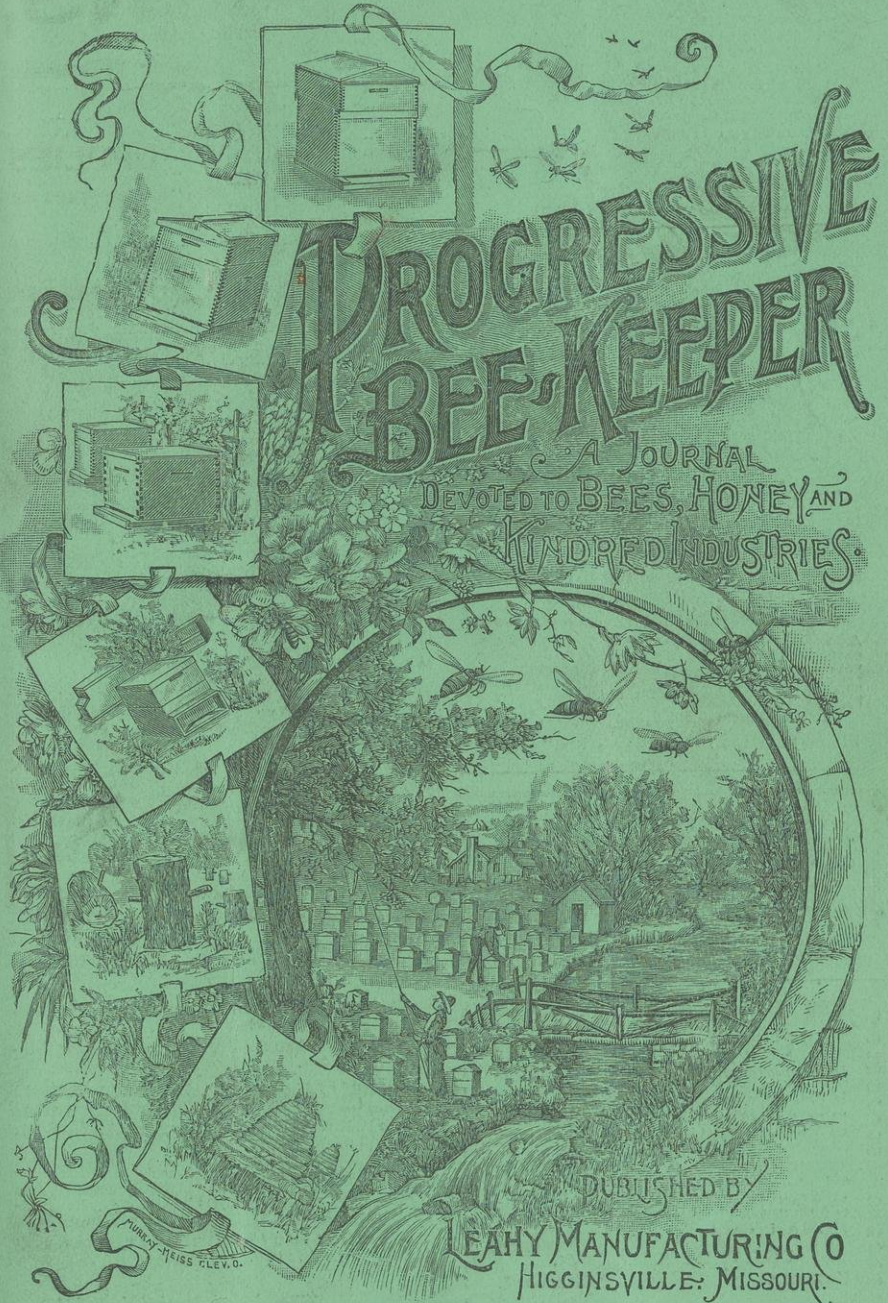
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APRIL 1902



THE PROGRESSIVE BEE-KEEPER

A JOURNAL
DEVOTED TO BEES, HONEY AND
KINDRED INDUSTRIES.

PUBLISHED BY

LEAHY MANUFACTURING CO
HIGGINSVILLE, MISSOURI.

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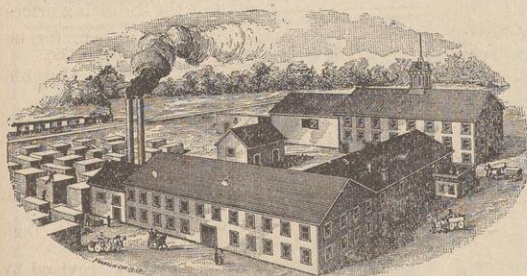
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50 Cents per Year.

Published Monthly by Leahy Manufacturing Company.

Vol. X. HIGGINSVILLE, MO., APR., 1902.

NO. 4.

SOME DAY.

Last night, my darling as you slept,
I thought I heard you sigh,
And to your little crib I crept,
And watched a space thereby.
Then bending down I kissed your brow.
—For, O, I love you so—
You are too young to know it now,
—But some day you will know.

Some day, when in a darkened place,
Where others come to weep,
Your eyes shall see a quiet face,
Calm in eternal sleep.
The wrinkled face, the peaceful brow,
A patient smile will show—
You are too young to know it now,
But some day you will know.

Look backward then into the years,
And see me here tonight;
See, O, my darling, how my tears,
Are falling as I write;
And feel once more upon your brow,
The kiss of long ago—
You are too young to know it now,
But some day you will know.

—Eugene Field.

WHAT TO THINK OF MECHANICAL DEVICES IN THE SUPER. —GIVING BOTH SIDES OF A QUESTION.

F. L. THOMPSON.

In the season of 1898 I prepared twenty supers with ordinary sections in one-half of each super, most of them with separators, and plain sections and fence

separators in the other half. They were not put on until the second crop, and as the season turned out poor only five were finished. The affair was given in detail in Gleanings, 1898, p. 917. When I took the supers off and examined the honey, I could see no difference in the general appearance between the honey in the two sides of each super. But, as one of the claims made for fence separators was they would go a long way toward doing away with the passage-ways in combs, I counted the holes in each section, and computed the average number of holes in each of the two kinds in each super, and found that there actually was a slight reduction in the number of passage-ways, brought about using fence separators, the individual advantage by supers being 21, 31, 26, 32 and 36 per cent. This I considered very unsatisfactory, and not at all in accordance with the bombastic claims made; for, as stated, the difference was not apparent to the eye, hence could have no commercial value. A little thought will show that the number of passage-ways should be reduced at least half, that is, there should be 100 per cent advantage in the new devices, to make the results of commercial value. I also observed with care the finish of the upright edges of each kind, but could

see no difference but a slight one in one super; however, I set down no figures at that time in this regard. As this point also was one of the claims made, even to the extent of publishing a half-tone of some of each kind of sections, showing the greatest possible contrast in that respect (said sections not having been produced in the same supers and conditions, not even in the same apiary, and yet referred to as "the best illustration of the difference"), I determined to investigate farther. In the season of 1899 I made a number of comparative tests, intending to report them immediately; but press of work intervened until I found time to give the larger portion, that relating to the finish of the upright edges, in the *Progressive* for July, 1900. Just after that, I lost the note-book containing the memoranda, and did not find it again until lately. Most of the remaining results follow, being all those concerned with the passage-ways alone:

| NO. OF SUPER. | AVERAGE NO. OF PASSAGE WAYS IN EACH SECTION. | |
|---------------|--|---------------------------------------|
| | With communication at the corners. | Without communication at the corners. |
| 1 | 2.75 | 2.93 |
| 2 | 2.13 | 2.50 |
| 3 | 5.00 | 4.55 |
| 4 | 2.50 | 2.55 |
| 5 | 2.25 | 2.50 |
| 6 | 2.50 | 2.56 |
| 7 | 1.50 | 1.56 |
| 8 | 3.00 | 3.50 |
| 9 | 3.63 | 2.12 |
| 10 | 3.17 | 3.13 |
| 11 | 3.00 | 2.42 |
| 12 | 2.67 | 3.63 |
| 13 | 3.69 | 3.25 |
| Average | 2.91 | 2.81 |

That is, the total average of thirteen supers shows no advantage at all in free communication at the corners.

Even eliminating super No. 9, which for some reason appears to be exceptional, the average of the remaining twelve, 2.85 and 2.92, only shows the very slight advantage of 2½ per cent. Practically, therefore, there is none. This is a surprise to me, for I had supposed, and I believe stated, before footing it up, that the result was about the same as in the first experiment. Full sheets of foundation were used in every case, with bottom starters. None but strong colonies were chosen, and the season was a fairly good one. In supers 1 and 2, plain sections and fences compared with two-bee-way 1½ in. sections and ordinary separators; in supers 3-6 inclusive, one side of each super was occupied by seven-to-the-foot four-bee-way sections without separators, and the other side, in No. 3, occupied by open-cornered 1½ inch sections without separators, in No. 4 by 1½ inch open-cornered sections with slatted separators (so that the conditions were here equivalent to plain sections with fences), in No. 5 by seven-to-the-foot open-cornered sections without separators, and in No. 6 by seven-to-the-foot open-cornered sections with separators; in supers 7-11 inclusive one side of each super was occupied by seven-to-the-foot four-bee-way sections without separators, and the other side of each super occupied by plain sections with fences; in No. 12 one side was occupied by seven-to-the-foot two-bee-way sections, without separators, and the other by plain sections with fences; in No. 13 one side was occupied by 1½ in. open-cornered sections, and the other with 1½ inch ordinary sections (two bee-way), both with ordinary separators.

Reverting now to the results already published in the *Progressive*, I remind the reader that every facility of free communication which would have an influence on the finish of the upright edges of the combs, that is, which would tend to produce "solid slabs clear to the wood," was given free play

in one side of each of 24 supers, and was contrasted with various opposing conditions in the other side of each one, and that the total per cent. of advantage thus shown in such free communication was 38½ percent. (It should be remembered that the longitudinal part of this communication does not exist in the Root fences). Here, again, common sense makes it evident that the number of uncapped cells at the sides ought to be reduced at least one-half for the results to have commercial value: that is, there should be 100 per cent. advantage in any device used to make it worth while to discard the old fixture and adopt the new.

Now, since no proof has been given at any time that the average difference between the two conditions in a number of supers, other conditions being equal, has come anywhere near being a perceptible and commercial difference, and four years have elapsed since that claim was first made, it is evident that the proof has not been brought forward, because it could not be. On the other hand, we all know that there is a great difference between the work of different colonies, and between the work of the same colony at different times, and that these differences much exceed 100 per cent. Hence it is strain of bees and condition of the colony, aided to a limited extent by management of the colony and supers, that, so far, form the true commercial elements in the intelligent production of first-class comb honey. Mechanical devices in the super, aside from foundation and separators, have, so far, cut a very sorry figure in comparison. Their influence has been microscopic, nothing more. There is a kind of free communication in the super which no one has ever yet tried, the theory of which promises much more than the theories of the others. I may experiment on it, but shall be surprised if it attains the commercial standard.

In the Progressive for May, 1900, I

argued at length that an editor should always take the position of a judge, never that of an advocate; that he should not alone leave to correspondents the office of presenting both sides of every important question, but should himself fully and fairly present both; and if he does not do so, he deceives his readers to just the extent that the influence of an editor exceeds that of a contributor; and that the same applies to suppressions as well as perversions of the truth, for, as a judge, it is his duty to make plain everything important he knows that has a bearing on the decision, no matter what his personal opinion may be. I notice that the spirit of the above is also stated by Mr. G. M. Doolittle, on page 501 of the *American Bee Journal*, being suggested by the recent booming of long-tongued bees. Let us now see what the attitude of *Gleanings* has been to both sides in the matter of super devices. As I have said, in the issue for Dec. 15, 1898, appeared an article of mine, giving a report of an experiment which showed that the fences were a comparative failure for the specific purposes for which they were designed, namely, lessening the number of passage-ways in the combs, and reducing the number of uncapped cells of the upright edges, and also mentioning other considerations, apparent from the editorial footnote quoted and commented on below.

"In the *American Bee Journal*, last April, page 225, there appeared an article from Mr. Thompson, condemning plain sections and fences, and it is but natural that the writer's prejudice (unconscious no doubt) should now be rather against than for them. He omits to give us one very important point; namely, the exact construction of the fences he used." The article referred to did not condemn plain sections and fences; in fact, said nothing whatever of their merits or demerits, but distinctly stated that they required emphatic language on account of their

expense, not because they were changes; and that still holds true to-day, with the exception of the sections themselves. There was no chance of misunderstanding the article. The cool effrontery of the editor in so perverting it is only equaled by his impudence in misusing his editorial influence to label it "prejudice," without the shadow of a proof for the assertion. This is not only the trickery of an advocate, but of a very small one. As to the construction of the fences used in the experiment, that information was mailed to the editor forthwith on reading the foot-note, but he never gave it, as he should have done after making the insinuation implied. The fences were precisely what they should have been for the supers and sections employed, and were almost certainly made by the Root Co.

"Mr. T. says there was no experimenting worth the name, and that both kinds of sections compared should be in the same super. That is exactly the way Mr. Crane conducted his experiments, he tells me, and yet the results are as he states in this issue." The rule of this editor seems to be "Fool the careless readers by any possible means, fair or foul, and by so doing you will always have the majority on your side." The numerous careless readers are virtually told, by the language above, that Mr. Crane's experiments related to the important points covered by mine, and that their results were very different. That is not true. Mr. Crane did not speak of the important matters at all, nor of any of the points which I covered, and there was none of the opposition which the editor implies. Comment unnecessary.

"As to Mr. Weed's statement that Danzenbaker was particular to have his foundation come clear out to the wood, that was a mistake for which I am partly responsible. Mr. Danzenbaker explained at the Omaha convention that he did not want foundation

to come clear out to the wood, and that he was no advocate of such practice; 1-16 in. was as close as he cared to go. Thus falls one of Mr. Thompson's main props." In the first place, that is not a main prop, for the records of my experiences are my only "main props," and they showed a lamentable deficiency in the "main props" of the fences. Secondly, the prop doesn't fall. I said "close to the wood," not "clear to the wood;" and in the same issue, p. 909, Mr. Danzenbaker himself says he wants his sheets 1-8 to 3-16 in. less than the inside width of the sections. That is as close as I can get it in practical work. For the statement in general, the editor is entirely responsible, not partly so. P. 691, he had said "I am inclined to think that the greatest point in that" [better filling of plain sections] "is to get the sheets of foundation large enough. It is very necessary to have the starters go clear across. I am told by Mr. Danzenbaker that that is the reason he gets his sections filled out so nicely. I have also been consulting with quite a number of others, and I find that the matter of having the foundation clear out to the sides of the section does away with pop-holes." Since I called attention to the possible influence of foundation in Mr. Danzenbaker's honey, however, the editor has been as mum as a mummy on that point. In "Facts About Bees," Mr. Danzenbaker endorses B. Taylor in assigning a value in the width of the foundation as important as that of the fences. Mr. Aspinwall (Review 1898, p. 108) says passage-ways are prevented by "filling the sections with foundation close to the sides, and giving the equivalent of room for travel by using a thoroughly open separator." (His separator is not a thoroughly open one, however). Mr. Getaz says in the Review "If the foundation sheet comes within $\frac{1}{2}$ of an inch of the section walls, the bees will attach the comb to the walls of the section, and the section

will be filled full. If there is from $\frac{1}{4}$ to $\frac{1}{2}$ an inch between the edges of the foundation and the section walls, the bees will build up just the size of the foundation, except here and there some attachment pieces extending to the wall. . . . With a still smaller sheet, or a starter, the sheet or starter is extended, and there is generally a better filling of the sides and bottom, except two big pop-holes at the bottom corners, and two at the upper corners; depending on the width of the starter. If the starter comes clear to the upper corners, no holes, or only very little ones, will be found there." Acting on this hint, I filled one super with alternate rows of sections filled with foundation $3\frac{1}{4}$ in. wide and 3 13-16 in. wide, the latter being the width I commonly used that year, making intervals next the wood of $\frac{3}{8}$ in. and 3-32 in., respectively. The former averaged $3\frac{3}{8}$ rather large holes to the section, the latter 3 5-16 small ones—not much difference in numbers. But in another super I alternated $3\frac{1}{4}$ in. sheets with 3 15-16 in. sheets, the latter requiring considerable care in putting in to get them to swing free, as the interval at the sides was only 1-32 inch. The average with the narrow sheets was $4\frac{1}{4}$ large holes; with the wide ones, 2 1-5 small holes, making nearly 100 per cent. advantage in the number of holes, in favor of the wide sheets. While the 1-32 in. interval is not ordinarily practical, I should judge from this that a 1-16 in. interval would be preferable to the 3-32 in. interval of the first super, and that a $\frac{3}{8}$ inch interval is tolerably certain to make poorly filled combs. While only two supers are not as decisive as a larger number would be, still there seems to be some grounds for supposing that the closer the foundation comes to the wood, the better, providing, of course, it swings free; and this is, in fact, what Mr. Geo. Hone, one of the well-known specialists of Utah, claims to be true. And if one considers the

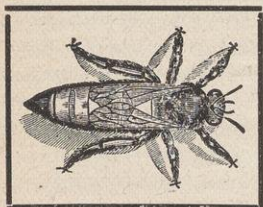
size of the holes as well as their number, the experiment indicates that care in this respect produces results which come close to, or reach, an appreciably commercial value, which is much more than can be said of the fences; and, to return to that designedly misleading foot-note, it is probable that Mr. Danzenbaker's honey owes far more to the foundation than to the fences.

"Mr. Thompson says, again, 'It is really amusing to see all of those so-called testimonials smirking at one another across the page.' This is almost as unkind as it is untrue." But it is true. See Gleanings for 1898. The editor was well aware that not the enthusiastic and irresponsible people who wrote the testimonials were criticized by that remark, but the one who marshalled them as evidence for the purpose of loosening the purse-strings of the public; and sought to wriggle out of the deserved correction by hiding behind them. That won't do; in the pompous rhetoric of the editor it is almost as unkind as it is unfair.

"As to glue being a failure, it is only such with Mr. Thompson, I take it. There is a great difference in glue, and even with good glue it takes experience to get good results." The editor was promptly informed that the extensive dropping off of the cleats happened with a neighbor too (and I have since been informed it happened in the warehouse in Denver), but chose rather to let the innuendo stand than to make the proper correction. Since 1898 the Root Co. have been doing a better job of gluing, but this does not alter the conditions of that time.

On page 145 of that year the editor said he wanted Gleanings to set forth fairly and honestly the arguments against the fence and plain section as well as those for it, and if any one thought Gleanings had not done it, he wished he would write a regular scorcher of an article, and if the writer was only honest and fair about it, he would

"I'm from Missouri"
But you don't have
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publish it. It so happened I did not see that remark until long after, in looking over back numbers. Hence my article was written without reference to it. But it was no doubt supposed to have been written in answer to that invitation, and the reader can judge for himself, by the comments, of the "fairness and honesty" with which

Gleanings set forth "the arguments against the fence and plain section as well as those for them," said arguments being entirely fair and honest. Later the readers of Gleanings were informed that I had "classed the plain section and the fence as a failure," when I had only classed the fence as a failure; and by various covert allusions sought to evade and undermine the force of my experiment. The trouble was, the experiment went right to the root of the matter and he didn't like it; for to do so is contrary to the practice of Gleanings, whose mainstay is not facts, but indefinite generalization.

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GOOD THINGS IN THE BEE-KEEPING PRESS.

SOMNAMBULIST.

From "A Carload of Honey," by M. A. Gill, Longmont, Colo. Bee-Keeper's Review, we extract the following:

"In filling supers I aim to have 700, or one for each colony, with a row of drawn comb, from the previous year, across the front and rear end of each super; the two center rows being filled with full sheets of foundation. Honey will be stored in the drawn comb as soon as any appears beyond the daily needs of the colonies; comb building, too, will not lag, as the foundation is right over the heart of the cluster, where there is the greatest amount of heat. A large per cent. of colonies thus started in the supers, can, by proper handling, be led onward and upward, so to speak, beyond the temptation to swarm.

"I always get all the honey finished up that is possible for me, and at the same time get a lot of drawn combs for next year's use."

He takes care to introduce his wife and two daughters, whom he declares cut quite a figure in the production of a car load of honey.

"My wife is champion at the filling of supers, as she will average to fill 100 supers in eight hours. I act as supernumerary by cleaning supers, dampening sections, cutting foundation, wedging up and carrying supers to and from the operator at the machine. I wet the sections with a fountain syringe, using the smallest size point. I have the water quite warm, and hold the point close to the openings in the sections so that a whole crate can be moistened very quickly."

What a picnic! Ever compelled to do each and all portions of this work alone and unaided, and see the results creep along at a snail's pace, comparatively? Then you can realize the de-

lightful time they must have. He concludes his article in this wise:

"Having the hives and sections all ready for the season's work, living as we live, in the city, knowing that there is one apiary for every day in the week, that they are from three to eight miles out, and realizing what it means in work, we are getting eager for the fray."

Thus forcibly emphasizing a quotation the editor culls from Success: "Success consists in making a livelihood at a congenial occupation."

C. A. Olmstead thinks that "if there had been as much time spent examining and measuring the wings of our bees as there has in measuring their tongues we would be better off. Stop and think of the wonderful influence the nurse-bees have on the larvæ in a queen cell. Instead of a short-lived worker we have a large, perfectly developed queen, capable of living four or five years, and laying thousands of eggs a day during quite a part of her life. I believe the nurse-bees offer the greatest field for investigation."

He also thinks the nurse-bees have great influence over the usefulness and longevity of the race, and draws our attention to the fact that "the larvæ in some colonies will be literally swimming in food, while in others it is in an apparently starving condition." He thinks this is one reason some colonies are prosperous while others perish. Thinks this a field awaiting improvement.

On the subject of swarming S. D. Chapman says: "The swarming fever almost invariably has its origin with those bees that are under fifteen days old. There are not field bees enough to furnish work for all these young bees. If you give to such colonies one pound of field bees, before they get the swarming fever, to balance up such colonies, you will have no premature swarms. When the field force is in proportion to the young bees the proba-

bilities of swarming are past."

Under the caption of "the importance of confidence in a mail order business," after reminding us that "nearly all of the business of selling apiarian supplies, bees, queens, bee-books, journals, etc., is done by mail, and the foundation of this business is confidence," he adds: "Confidence is a

Continued on page 108.

A MILLION TESTIMONIALS JOHN CONVINCED
30 DAYS TRIAL **WILL**



Our 50 egg compartment hatchers have advantages over all other incubators. Bantams at \$5, \$9.50 and \$15 for 50, 100 and 200 egg sizes. Hatch every good egg. Send 2 cents for No. 75 catalogue.
BUCKEYE INCUBATOR CO., Springfield, Ohio.

50 Egg, \$5.00.
 100 Egg, \$9.50.
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INCUBATORS
 Sell 6 at \$8, or 5 at \$9.50, or 4 at \$14.50
 and get one of same kind **FREE**

Self-Regulating. Hatch every good egg. Guaranteed for 2 years.

AGENTS WANTED IN EVERY TOWNSHIP.
 Catalogue No. 75, describing all our goods mailed Free.
INVINCIBLE HATCHER CO., SPRINGFIELD, OHIO.

APRIL.

At the forks of the road March lost his way, and loudly called his winds that wandered in the crimson deeps and violet vales of April. They cried to the hills, that signalled them with banners green and glories and sent the echoes of their voices back to the opposing hills. And then did March, with trumpet blast, command his winds to storm the rosy battlements and all the wreath-crowned captains of the April armies; and the captains fell before their might, and their rich raiment was rent and scattered over thousand hills; and under a sky serene and beautiful the soldier-winds lay down to rest and sighed themselves to sleep, and, sleeping, dreamed of little children, sweet-singing in the sunshine, and reaping from that storm-swept battle field bright arms full of bloom!—Frank L. Stanton.

SALZER'S Superior FODDER PLANTS

VICTORIA RAPE

About 10 miles ahead of Dwarf Essex Rape in business, in vigor and nourishing quality. It makes it possible to grow swine and sheep and cattle all over America at 1c. a lb. It is marvelously prolific. Salzer's catalog tells.

Giant Incarnate Clover

Produces a luxuriant crop three feet tall within six weeks after seeding and lots and lots of pasturage all summer long besides. Will do well anywhere. Price dirt cheap.

Grass, Clovers and Fodder Plants

Our catalogue is brimful of thoroughly tested farm seeds such as Thousand Headed Kale; Teosinte, producing 30 tons of green fodder per acre; Pea Oat; Speltz, with its 80 bushels of grain and 4 tons of hay per acre, Billion Dollar Grass, etc., etc.

Salzer's Grass Mixtures

Yielding 6 tons of magnificent hay and an endless amount of pasturage on any farm in America.

Bromus Inermis—6 tons of Hay per Acre

The great grass of the century, growing wherever soil is found. Our great catalogue, worth \$100 to any wide awake American gardener or farmer, is mailed to you with many farm seed samples, upon receipt of but 10 cents postage. Catalog alone 5 cents for postage.

JOHN A. SALZER SEED COMPANY, La Crosse, Wis.




Please mention this paper, in answering this advertisement.

"Riverside Farm, or Led By a Bee"

Bessie Bond, Author.

CHAPTER IX.

WEDDING BELLS.

How time does creep when a man is waiting for his betrothed to name the wedding day! I never did believe in long engagements and don't till yet. I plead in vain for Christ's birthday to be set apart to celebrate our nuptials, then combine a wedding tour, with a business trip, to my old Kentucky home.

"Why, dear," said she in reply, "if the weather is so cold as you say it is, I would freeze to death in your beloved old home; having all my life been used to a southern clime, you know I could not stand your zero weather. But, oh! how I would love to spend one winter there, where I could see snow and ice to my heart's content. I hope to go with you in the spring, and if your business does not call you back here too soon I think I would be acclimated and could stand the weather much better by next winter. Do you not think so?"

To which I, of course, had to say yes. So I was kept waiting till sunny May to claim my bride: I will admit the larger portion of my time while waiting was spent at Farmer Bird's, but I was not idle all the time, for long ere the last snow of our northern climate had melted away, I in my southern home had moved my bees to the "Lady May's Retreat," and had more hives made, so as to be ready for the early swarms; also to transfer those from the trees to the hives. Bee trees in those days were plentiful. Pat and I cut thirty-seven in March and April, when old Uncle Billy, our carpenter, took sick, and we could get no more

hives, so had to quit looking for bee trees and prepare for the coming nuptial feast. But I shall not weary my kind readers by giving a description of the bride's apparel, or that of the bride's maids: neither will I tell of the happiness of the groom, for the memory is sacred to me yet, and I had rather draw the curtains so as not to reveal to the eyes of strangers what I cannot find words to express. The boys all left me at Christmas time, except Will and little Mart. They remained to act as "best man;" then we all went back to Kentucky together, leaving Pat and the servants to look after themselves, Riverside and the bees for one whole year.

At the end of that time I had sold the old Kentucky home and removed to Riverside with Aunt Millie, Bess and three old servants that begged to stay with us. Yes, and that is not all that comprised my household. If I was a happy husband when I carried my queen away to another hive, I was a happier father when I brought her back to Riverside. Of course little Carl, the son and heir, was all the one in the world to us, and we built air-castles for him, which turned out in the end just as all such castles do—a bubble, nothing more. But I was somewhat surprised a few days after my return when Pat came down, dressed in his Sunday best, bearing a portmanteau and looking quite the commercial traveler.

"You may go along, Mr. Drummer, we are not buying any goods today," said I, gingly.

"Away wid yez nonsense, Mr. Cal, for I jist shtopped in to tell yez all good bye. O've batcht a hould year and

more widout ye, and yez all done wid out me. Ye has got your quane and partner in the baa-business now and I think its about toime Oi was goin' to fetch mine. Yez all never blaved Oi had a Bidy back in Ould Erin, but if the ship don't sink wid her O'll be back wid her by Christhmas toime. So now if ye'll look out after me baas till O'im back, O'll promise to dezol partnership wid yez, if it's all the same to you."

"Sure I will do all of that, Pat, and more; but we can talk of that when you get back. You must take Bidy a wedding present from me, (handing him five gold eagles) and tell her not to hate me for keeping you away from her so long."

"Well, Pat, who would ever have thought that your Bidy was a reality," said Belle. "I have often read in story books of fiction where lovers were true to each other for a number of years, but I thought it was to be found only in fiction."

"May I ask why you have waited all these years?" asked Bess.

"Bliss your swate sow! yes: I have thried and thried to kape me savings till Oi could get enough to kape me Biddie dascent, but Oi could niver save more than enough to kape meself dasent till I larnt to be a Baa-man, and let rum alone."

"Why Pat," said I, "you speak in riddles. You talk as though you have made something out of the bees."

"Shure Oi have, Masther Cal. Didn't ye gave me \$20 per month, iver since ye left me wid the farm to see afther, besides all I could make outside the farm?"

"Yes, to be sure, but what does that have to do in connection with the bees?"

"Only this, Misther Cal. Oi have sould three thousand pounds of comb honey, from thirty-five colonies of baas, and got fifteen cents for every pound of it, and as Miss Belle said: Spirits of all kinds, wid the exception

of a gentle spirit, was bad, when taken wid the sthings. Oi let the m alone. Now ye can count it all up and see for yourself how fat me purse has grow'd."

"Well done Pat, you have no more than you deserve; but had I known, you really had a sweetheart waiting for your return, you should have had the means long ago to keep her like a lady. So now, goodbye, and "Bon-voyage." We have kept you too long already, I fear you will have to run to catch your train," so the rest of the "Goodbyes," were hurriedly spoken, and Pat—our faithful old Pat, was really on his way at last, to fulfill a promise, contracted twenty years before; leaving us all with smiling faces, but streaming eyes, which only the resort of a cambric kerchief, and the solitude of our own rooms, could allay.

CHAPTER X.

THINGS IN GENERAL.

Well it seems that Pat has found the "Honey-pond," of which this state boasts, and I wonder if the long talked of "fritter tree," could not be found near by, if we would only seek for it. Thus I ruminated on the evening after his departure. "If there is so much to be made at it," thinks I, "Why not adopt it as a business?" It's a good honest business and nothing to the detriment of a man's good name and social standing. Yes I'll do it. I have gone into the business as a child would a new play, merely for the amusement, but my fortune is not quite what it used to be, and nearly everything I have now is turned into cash, and should the bank fail, what would I have left on which to maintain a family? Besides it is not sufficient to keep in idleness any great number of years. So I will go into "practical bee-keeping" as a business, from now on, and do what I have never done before, "turn an honest penny." Of course I have never turned a dishonest

one either; which I consider much in my favor, even if I have been a drone all my life. Yes, I will make out an order this very day, and send to the Leahy Mfg. Co., for a smoker like those I saw advertised in his journal, not long since. I think we have used the pipe and tobacco of my dear Belle's invention quite long enough. I will get a veil to, for I do dread the bee sting, though Belle says I will soon get used to them and they will not hurt. I hope so at any rate. I will order hives, too, for I believe they are much cheaper made at the factory than I can get them made here. So I soliloquized and found by looking over the price list it was quite true. I did as Pat had done, went into the business heart and soul, but this year was not quite so good for bee-keeping as last year had been, though it was enough to raise my hopes above summer heat, only to let them drop to Zero the next year, for I got "foul brood" amongst them somehow and had to burn about thirty colonies, hives and all, which left only about fifty colonies, of which I had kept on the "Lady Mays Isle," quite free from the disease. But poor old Pat lost all of his, and I gave him half of those I had left, for on his return with his faithful Biddie, we dissolved partnership, each declaring one partner was enough to boss us in any business.

Of course we hated to give up our bees but from all descriptions of the disease given in both Gleanings and the A. B. J., we could not help believing it to be "foul brood." As no sure remedy had at that time been given, and knowing the disease to be contagious, we thought the best and cheapest way to get rid of it, was to burn the hives, bees, comb and honey, all together, then start anew. It was several years afterward before we could be induced to have imported queens in our apiary; we had paid too dearly for our lesson to forget it so

soon. Hybrids or the common little black bee, was good enough for us. But one day I went to the postoffice and to my surprise and chagrin, found awaiting me, a beautiful thoroughbred Italian Queen.

The postmaster was also a groceryman. As he handed out the cage with the rest of my mail, he expressed himself thus; "It's a good thing you came today, to get those bees; for I had about made up my mind what I'd do with them."

"Why you have no bees; what could you do with them? I asked."

"There is a whole swarm in my barrel of honey, and I aimed to put them in a box with your queen; then I'd have a colony of my own. As it is, you may just pay me for the barrel of honey, and two barrels of water, I have fed her, and take her along."

"Great Scotts! man, you have not been feeding them have you? surely they started with enough feed to last them a month."

"No they did not; one was starved to death when it got here; but I have fed the rest every day, for the past week, and managed to keep them alive, I had to keep it secret too; for I have no idea any one would have stopped in for anything had they known there were bees in the house."

Concluded next month.

The Progressive. Bee-Keeper.

A journal devoted to Bees, Honey and Kindred Industries.

FIFTY CENTS PER YEAR.

G. M. DOOLITTLE & R. B. LEAHY, EDITORS.

"WHAT will the harvest be?" asked an exchange. "Well," replied the wag, "you just wait till the harvest bee crawls up your trousers leg and you will find out. Perhaps at that moment you will wish for a short crop."

THAT system of management which combines the safety and health of the bees, together with the production of

the largest amount of honey available to the proprietor, while providing generously for the inmates of the hive during the winter months, deserves the greatest patronage.

THOSE who paint hives should avoid dark colors as much as possible, for in extreme hot weather, unless shaded, the combs in such hives are liable to melt down, while with a hive painted white no damage is likely to occur. Such melting down of combs often comes in times of scarcity of honey, so that robbing is started by the honey running out at the entrance of the hive when the inmates are in no condition to defend themselves, and from this cause and the spoiled combs, much damage is done.

A COLONY of bees can, with ordinary management, be doubled every year for several years before the field, if a fairly good one, is overstocked. Let us figure a little and see what the result will be, say for six years, beginning the first spring with one colony. In the fall of the sixth year we have 64 colonies; 20 pounds of honey to the colony every year is not an extreme figure for the average during that length of time, and 10 cents per pound is not high for honey; so we have 2,520 lbs. for six years; that at 10 cents makes \$252. The 64 colonies at the low rate of \$3 per colony make \$192. This added to the value of the honey gives the snug sum of \$444. This is no big thing, but it is enough to pay for all the trouble that it costs.

SOME seem to think that the stings unavoidably received by every apiarist have a tendency to shorten life, or bring on the person handling them chronic diseases, such as rheumatism, erysipelas, etc. While a few believe as above, many are positive that there is no pursuit so conducive to good health as the keeping of bees. If I am correct, Mrs. L. Harrison, that noted lady apiarist of the state of Illinois,

gave utterance to these words some fifteen or eighteen years ago: "Eighteen years ago the doctors gave me but three years to live." So she has now cheated them out of from 34 to 36 years, and attributes her health to her occupation as a bee-keeper. There is something very cheering in work with the bees out in the open air, in the sunshine, cheering to a degree not obtained by much of the work indoor, to which so many women are constantly confined.

SPEAKING of a colony of bees which comes out weak in the spring, a writer in one of our bee papers asks this question: "Do we know just the exact condition of that colony the previous fall, the age of the queen, the relative portion of young and old bees, the quantity and quality of stores, whether the bees had a chance to arrange them to their liking after we had shifted them about?" These are questions well worth thinking about by every one having colonies which came out weak this spring. And herein lies one of the secrets of successful bee-keeping. And the trouble why so many colonies do come out weak in the spring is because their owner pays little or no attention to his colonies after he takes the surplus off during the summer. It is every bee-keeper's privilege, yea, duty to know just the exact condition of every colony before cold weather comes in the fall, and if any are lacking in any thing which looks toward success, supply that lack before it is too late to do it profitably for the bees. Read that last question over again and then think how many of us go to work late in the fall overhauling things and "shifting them about"; after it is too late in the season for the bees to properly arrange our awkward work so that they can get everything to their liking before winter sets in. That writer who once said "summer is the time to prepare bees for winter," said truly, and it would be money in the pockets of many

did they heed it, as well as the saving in life of thousands of colonies every year.

AND THIS same writer asks, "How many, I wonder, are aware that the weather makes a great difference to the temper of the bees?" And here is something again which it is well to think about. It seems strange to me that hundreds of bee-keepers will yet insist that a cool, cloudy day is the best time to handle bees, and that they are more likely to sting when it is "hot, sweaty weather." Of all the bad times to handle bees, the cool, cloudy day of summer is the worst, when working with the bees during that season of the year, and I always put off all the work possible on such days, hoping that the next may be a warm, sunshiny one. With the warm, sunshiny day thousands upon thousands of the occupants of the hive are off in the fields, so that there is less population by far to become irritated, and those away to the fields are just the ones which are the most easily irritated of any in the colony; for, whoever knew a colony composed of all young bees to be very vindictive. Then the time of the year has a great deal to do with the temper of bees. I have often found that a colony which could be easily handled without smoke during May and June could hardly be handled at all during September and October of the same year. The reason seems to be that in the spring they were feeling poor on account of their combs being nearly empty of stores, while in the fall, after they had gotten rich and affluent, they considered that no intruder was welcome to even a sight at their treasures, so went about to protect them in a way that meant business. Then, again, I find that location has much to do with this matter, bees being much more mild in disposition in the south than in the north. At one time I sent a queen whose workers were very gentle to a

party way up in northern Wisconsin, and after keeping her a year he returned her, saying that for honey-gathering her workers were a great success, but not half so much so as they were at stinging. "In fact," said he, "I would rather go without honey at all than to try to handle such a lot of bees as that queen produced," and "that while her colony gave twice the honey any colony of his other bees did, he wouldn't tolerate her at all." Knowing that her progeny were not unusually cross with me, I kept her during the rest of that season to see if they would be different than formerly, but found they were not. As she was one of my best, and having a call for an old queen of that class from a party in the extreme south, I sent her to fill his order. I now waited till I knew her bees must be old enough to be of "stinging" age, when I wrote and asked him how he liked the disposition of the workers from the queen I sent him, and the reply was: "They are the most peaceable bees I ever saw. I am handling them two or three times a week to get brood for queen-raising, using no smoke or veil, and not a sting yet." And I find queens giving peaceable bees in the south are quite the opposite here and further north. It is always well to understand these things before we condemn too strongly. G. M. Doolittle.

GREEN RAPE costs **25 cents per TON!**

Greatest, Cheapest Food on Earth for Sheep, Swine, Cattle, etc.

Will be worth \$100 to you to read what Salzer's catalog says about rape.

Billion Dollar Grass will positively make you rich; 12 tons of hay and lots of pasture per acre, so also Bromus, Peaout, Speltz (400 bu. corn, 250 bu. oats per acre), etc., etc.

For this Notice and 10c. we mail big catalog and 10 Farm-Saved Novelties, fully worth \$10 to get a start.

For 16c. we mail 150 kinds of Flower and Vegetable Seeds and catalog.

JOHN A. SALZER SEED CO., LA CROSSE, WIS.

Continued from page 106.

plant of slow growth. Only years of fair, honorable, satisfactory dealing will secure the implicit confidence of a customer. One little lapse into unfairness and confidence is gone. Possibly it may be regained in a degree, but that philosopher and humorist, Josh Billings, covered this point most completely when he said, 'yes, a damaged reputation may be repaired, but the public will always keep its eye on the crack.'

Three points are taken from the Denver convention, the first two supplied by Mr. M. A. Gill and the third by Mr. R. C. Aikin:

"Smoke is often used in too large quantities when removing supers; too much smoke confuses the bees and they don't know which way to run. I once knew a beginner who was fully determined to conquer his bees and kept pouring the smoke into their home until they were mostly out in the air, and ready to avenge themselves by attacking anything that came within their reach, they really caused one runaway and rendered other hives almost unmanageable, thereby creating a panic sufficiently exciting to satisfy the most bitter enemies of bees, as well as fun-loving youngsters."

The second point furnished by Mr. Gill is, "a man foolish enough to crowd in upon another's territory would never prove a serious competitor."

The point from Mr. Aikin is as follows:

"Increased breeding in the spring comes from the handling of honey. If the honey comes from the fields, well and good, if not, results can be secured artificially by any method that induces the bees to handle honey. In this direction, advantage may be taken of the fact that bees are inclined to rear their brood near the entrance, and to store their honey in the back part of the hive; simply pick up the hive and turn it half way around, putting the back

end of the hive at the front, or where the entrance was before—that is, reversing it or turning it end for end. This puts the brood at the back of the hive, and the honey at the front. This does not suit the bees, and they at once begin to remove the honey at the front and replace it with brood; this leads to the handling of honey and an increase of breeding."

In giving his ideas on covers C. A. Hatch says what we want of a cover is, "first, a roof to shed rain and snow. Second, protection against cold and loss of heat. Third, a protection against the heat of summer," and adds: "It is no easy problem, as you will see, to fulfill all these requirements, and yet have our cover light, handy to adjust to the hive, cheap, and always convenient. Also, experience proves that the feature of sliding over, or telescoping, as it is called, has many advantages." His idea of a perfect cover is one that is "light, strong, always true, cannot warp, not easy to blow off, conserves heat while allowing moisture to escape, can be used with or without a quilt, and is not very expensive."

Mr. E. H. Schaeffle tells us "if the winds are apt to flirt with the covers, a Van Deusen hive clamp holds the cover in place."

For our encouragement, R. D. Fisher, in *Gleanings* informs us: "It is not unlikely that the future will be conducive to much litigation between the fruit-grower and the bee-keeper."

Dr. Miller gives basswood two black eyes in these two "Straws:" "Since reading that wax-worms would not eat into basswood timber I have met positive violations of the rule, for there was no question about their eating into the wood in many places. Whether they would have done any worse on pine I do not know."

In this locality if you should put a basswood top-bar in a hive and then go fishing, when you got back you'd find that top-bar had warped and

twisted clear out of the hive, and was crawling all over the bee-yard."

Two applications for the prevention of stinging are also mentioned: "Propopolisin is very highly spoken of in Deutsche Illus. Bztg., Editor Gravenhorst saying that he has been astonished at the results of its use in different wounds and sores. It is also said that, if the hands are rubbed with propopolisin, they will not be stung by the bees.

An inexpensive apifuge (is it as good as inexpensive?) is given in Revue Int. Takes 2 parts vaseline to one of naphthaline. Melt the vaseline with mild heat, then mix in the finely powdered naphthaline. The writer says he rubbed his hands with the mixture, and visited 48 colonies without getting a sting, while the bees attacked furiously a veiled and gloved assistant."

On this subject the editor comments as follows: "The hovering or flying bees will very seldom sting. It is the one or two that will stand up high on their legs, twist nervously this way and that, and finally make a sudden dart—zipper-whiz-z-z-ping—that will sting any thing in sight—rush into a smoker when the smoker is red-hot—yes, and try to sting the barrel itself, and finally writhe in agony on the hot metal before it will give up. No, I would not give much for any preparation in the way of apifuge as a preventive of stings to the bare hands when such bees are on the war-path."

From this same source we glean that R. C. Aikin put up 20,000 lbs of honey in barrel pails, let it candy, and that before Dec 15th, more than three-fourths of it had been sold. Who said candied honey is slow of sale?

S. T. Pettit presents a plea for candied honey in which he says: "I am painfully convinced that some of us are making a mistake in saying so much about putting liquid honey upon the markets. I fear the practice, for two reasons, has a tendency to a temptation,

with some, to allow a little adulteration to slip in, and more as the years go by.

"If we all would follow the simple easy way of allowing the honey to candy as nature intended it to do, nearly everybody would, after a certain amount of education, prefer it candied, and that would save a world of trouble and expense. A few days ago a neighbor asked me, 'Can I get another ten pounds of your dark fall honey?' I said, 'Yes. Do you want it liquefied?' The answer was a decided: Oh no! we like it better solid. It doesn't have any strong taste when it is candied.'"

The conclusion of the article with Editor's comments follows:

"It does seem to me that we are now in a down-grade movement in this liquefying business.

"I know that many good men are now engaged in the process; but I feel sure that time will tell that they are making a mistake."

Aylmer W., Ont., Can.

[I am with you in believing that we ought to push candied honey more than we do, for it is a fact that rank honey, when candied, is a little nicer eating than when in the liquid state. On the same ground we should educate consumers to the fact that extracted honey put up by a bee-keeper is always pure—that is, I think we may state that, as a rule, no bee-keeper will adulterate, so I fear nothing on that score.—Ed.]

From the above it would really seem that the education had yet to begin with the bee-keepers themselves. Believe me, this selling of candied honey is "nothing when you get used to it," and to one situated as we find ourselves, that is, customers want and will have nothing else (and I know of not a single exception), all this talk of difficulties lurking around verges very near on to the ridiculous.

But when the editor says "the result of the recent slanderous attacks on honey is that the bee-keeping industry

has been damaged to the extent of a good many thousand dollars," my risibilities are not in the least affected; belonging as I do among the injured, I feel all the weight of this truthful assertion. But did it not strike you as

slightly amusing when one A. I. Root, who has all along for years offered a reward of one thousand dollars for a single section of artificially made honey was accused of being engaged in the manufacture of this very article?

A FEW CENTS

invested at the right time in Watkins' Remedies will not only **SAVE YOU A HUNDRED TIMES** as much in doctors' bills, but also the danger and suffering caused by the tedious delay in the doctor's coming.

WATKINS' REMEDIES

are nothing new. They have stood the test of time, having been on the market for over forty years. They are always effective, always ready to use, no delay, no unnecessary suffering, no expense to speak of. Only prompt, pleasant, permanent relief to man and beast.

Beware of Imitations, Watkins' Remedies are sold through our traveling salesmen in the country, and are known by the picture and signature of J. R. Watkins on every wrapper and label as follows:



If our agent has not yet called on you, or if we have no agent in your county, kindly send us your name and address, and we will see that you are promptly supplied.

- - FREE TO ALL - -

Your name and address on a postal card will bring you a copy of Watkins' Home Doctor and Cook Book, a fully illustrated 100 page book, containing weather forecasts, fine cooking recipes and much valuable and interesting information for old and young. The finest book of the kind ever published. Write for it to-day.

The J. R. Watkins Medical Co.

34 Liberty St., WINGNA, MINN., U. S. A.



F.B.W.G.

The idea of a producer, or any one dependent upon the producer for business, as the supply dealer unquestionably is, being so very short-sighted as to lower the standard of goods put on the market by adulteration or any other means is ridiculously absurd. It would be killing the goose that lays the golden egg. Judge of my surprise then, if you can, when I recently received a letter from a new customer, a part of which I give verbatim: "A great many think it not pure on account of the color. One old bee man says it is adulterated with brown sugar. I never asked you if it was pure and you never said it was, and all I could say was that I believed it was; if not it is a good imitation."

Evidently the people of that vicinity are much like the old man, who when asked, "do you think a man ought to vote according to the dictates of his conscience or his interests," replied "they ain't enough people ever git 'em separated to make the question of any considerable importance."

Such people live only in the present; for them there is no future, else they would remember that one fraud "breeds enough distrust to choke out the prettiest crop of confidence that a fellow ever cultivated." And that old "bee man" must have been old in years, and just possibly not old in bee-keeping, or he would not have been so ready to injure another, and through him the whole brotherhood of bee-keepers. "Compound cussedness" is all the term by which I can describe such conduct. I wrote my salesman, who is manager of a large and flourishing concern, that were he a veritable George Washington in truth telling he need have no hesitancy, whatever, in pronouncing that honey as pure, genuine and unadulterated as any ever gathered by the honey bee in any clime or country.

The above shows the public are on the alert and even more than ready to suspect fraud, and who shall say the

recent slanderous newspaper attacks are not responsible?

The census bureau report shows that on June 1, 1900, there were 707,261 farms on which bees were kept, or one for every eight farms in the nation. Number of colonies, 4,109,625, valued at \$10,186,513. Less than six colonies to each farm reporting, and producing in 1899 \$9.42 per farm, or about \$1.57 per colony. Great inducement to enter into the business. Of this value 35 per cent. is from the north central, 12 per cent. is from the north Atlantic and 15 per cent. from the south Atlantic, 23 per cent. from the south central, 14 per cent. from the western states, and 1 per cent. from Hawaii.

Texas reports the largest quantity of honey, California the second and New York the third largest.

The heaviest producers among the counties are Fresno, San Diego and Tulare, of California, and Tomkins, Cayuga and Seneca, of New York.

The twelfth census is the first to report the number of farms on which bees are kept or the number of bees and their value. Possibly this is one of many reasons that apiculture is now recognized by the United States government, a special commission having been created, namely apicultural investigator, and Prof. Frank Benton advanced to the position.



1 2 3 4 5 6

Count the Chicks
as they come out. Then
count the eggs, and you
will see why so many
people are using

Successful

Incubators and Brooders,

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No. 717 Surrey. Price, \$75.00. As good as sells for \$50.00 to \$70.00 more.

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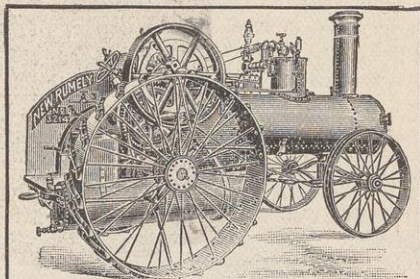


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Send for price list of Bee-Supplies and our queen circular. 100 Tested queens for early orders.



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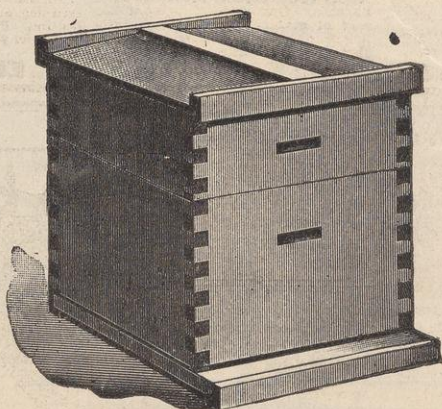


Our genial friend, Frank L. Aten, has lately received a car load of those unique "Higginsville" Bee Supplies. He issues a catalogue of everything needed in the apiary, and will be glad to mail you one if you will send him your name plainly written on a postal card. Mr. Aten also rears the best queens on earth.

Address,

Frank L. Aten,
Round Rock, Texas.

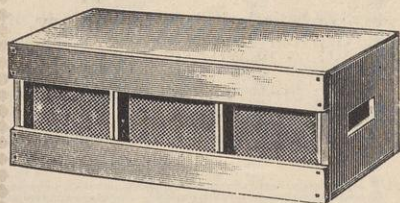
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...as... a Few Stands of Bees.

They work for nothing and board themselves, and require but little time to handle. We have just received a carload of the famous "Higginsville" Supplies, consisting of dovetailed hives (like cut), sections, foundation, extractors, shipping cases, smokers, bee veils, swarm catchers, etc.....

Write for new 1902 catalog, just out.



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Made to Order.

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Made of sheet-brass, which does not rust or burn out, should last a lifetime. You need one, but they cost 25c more than tin of the same size. The little pen cut shows our brass hinge put on the three larger sizes. No wonder Bingham's 4-inch Smoke Engine goes without puffing, and

oes Not Drop Inky Drops.

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 of a smoker. The Doctor 3½-inch just received fills the bill.

Respt., O. W. OSBORN.

Mt. Pleasant, Mich., 7-7 1896.

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

Respectfully, WM. BAMBU.



The perforated steel fire-grate has 381 holes to air the fuel and support the fire. Prices. Heavy Tin Smoke Engine, four-inch Stove, per mail, \$1.50; 3½-inch, \$1.10; three-inch, \$1.00; 2½-inch, 90c; two inch, 65 cents.

BINGHAM SMOKERS

are the original, and have all the improvements, and have been the STANDARD OF EXCELLENCE for 22 years.

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We also have one second-hand six-inch mill for making extra thin foundation, and one second-hand ten-inch mill for making medium or light brood. These are for sale cheap. Write for prices.

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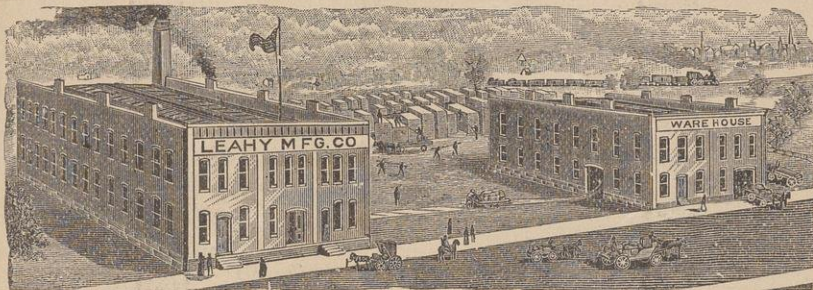
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is one that will not disintegrate quickly, but form a hard, durable coating as impervious to atmospheric influence as it is possible to make a covering of this character. THE BEST BEE HIVE PAINT MADE.

NEW ERA HIGH GRADE PREPARED PAINT

meets all these requirements perfectly, as it is made from the best carefully selected materials only. It may cost a few cents more per gallon, but considered from the standpoint of DURABILITY and SATISFACTORY RESULTS, it is by far the most economical article that can be used, and its intrinsic worth is bound to be appreciated by all careful and painstaking bee-keepers.

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You can save the sells from a swarm and mate the queens all from one hive with no previous experience at rearing queens.

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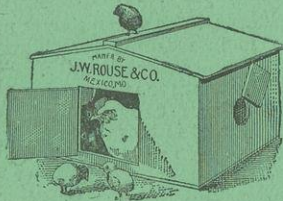
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