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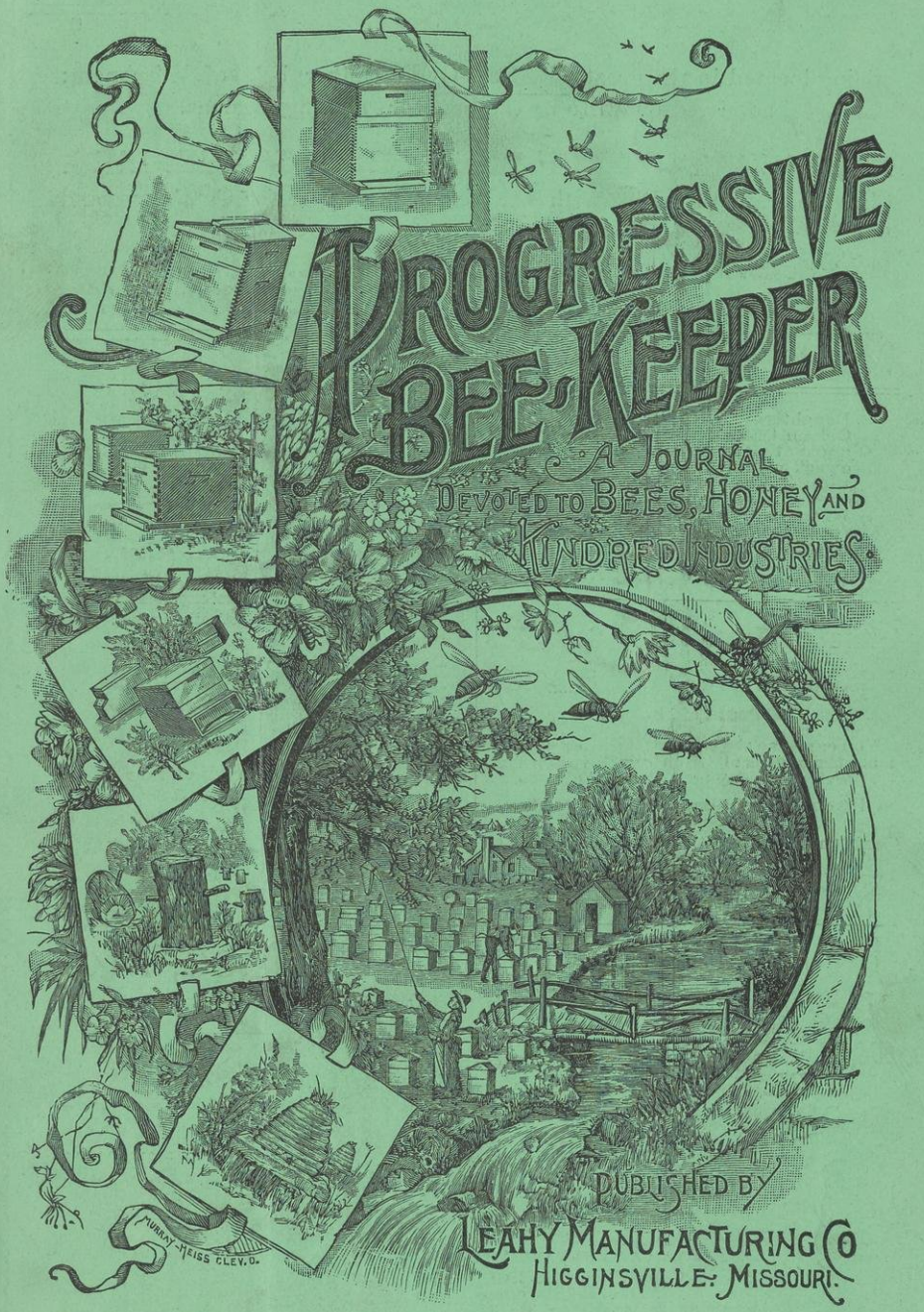
Higginsville, Mo.: Leahy Manufacturing Company, August, 1902

AUGUST 1902



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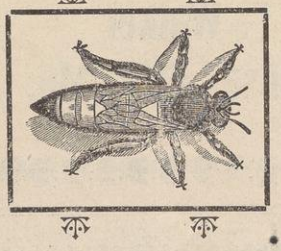

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28	" "	[2 "],	"	"			1 70
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The Amateur Bee-Keeper, (a gem for beginners), by Prof. J. W. Rouse; price, 28c.

Advanced Bee Culture, by W. Z. Hutchinson; 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.

Scientific Queen-Rearing, by G. M. Doolittle; price, $1.00.

Langstroth on the Honey Bee, revised by Dadant; price, $1.15.

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50 Cents per Year.

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Table of Contents.

WINDING UP THE SEASON.

F. L. THOMPSON.

"No supers to be put on later than about August 10" is a rule for Colorado that fits a great many localities and seasons, in spite of two rather remarkable exceptions of late in my home locality. The supposition is that the second crop flow will stop about August 20, which is generally the case. With the removal of the supers should begin the wintering preparations. This is not commonly attended to then, on account of the work of preparing the honey for market, the bulk of which falls just at that time. But it should be, for here is where the principles of economy in work finds several applications. If one is accustomed to inspect his colonies for queenlessness at the close of the season, it will save opening the hives once to take the opportunity to do so when the last super is removed; and it will save disturbing the bees twice more to also fix them up for winter at the same time. In this locality, as reliable a method as I know of for preparing the bees for winter is one that I have partly followed the last two years, borrowed from the practice of a neighbor, Mr. Rauchfuss. At the time the last super is removed, it is replaced by an empty super. If the latter is a T-super, it is put on up side down; if it has other fixtures, these are removed. The bees, within the next few weeks, propolise tightly the junction of the super with the hive. When it is too cool to propolise further, two or three thicknesses of of burlap, cut a trifle larger than the hive, are laid over the frames, and the edges tucked down snugly inside all around. In this manner a slow upward ventilation secured through the porous burlap and the loose junction of the cover with the super, while the tightly sealed junction of the super and the hive presents cross-currents of cold wind and snow; and the burlap quilt, being entirely within the hive, does not act like a wick in absorbing outside moisture, as is frequently the case by the ordinary

method. This method entirely does away with internal moisture.

If one can manage to take a little more time, while scraping sections, to also scrape the supers and separators while they are in the hands, a second handling of the same is saved, and time economized in the long run. This is giving advice I never practised. But after calling on Mr. Walter Martin last winter, and seeing him illustrate that plan, it looks reasonable. He uses section-holder supers, with tin separators nailed on the section-holders In emptying a super for scraping, it is placed up side down on a table, the contents loosened all around by prying with any convenient tool, and the super proper lifted off the solid block of section-holders, separators and sections. Then the super is scraped before being laid aside, the first section-holder with its separator lifted off, scraped, and set in the super, then the first four sections scraped and set in a shipping case, then the next section-holder, and so on. Then you don't have to take a week or two next spring to scrape several hundred superes.

Applying a similar idea to extracting, it is well to get in the habit of scraping each frame of propolis and burr-combs while it is in the hands at the time of uncapping. The shreded mixture of propolis and wax resulting from scraping sections and separators in summer is very handy for making into stoppers at a moments notice for any kind of aperture, from the entrance of a queen-cage to an undesired hole in an old hive.

If tin separators and T-tins are boiled instead of scraped, it might be well to remember that it has been said that washing soda is as good a solvent for the propolis as lye, while it does not eat the tin so much. I tried it once, using a pound to about two gallons of water. Possibly that was two strong, as it made the tins look like window-panes on a frosty morning. It is cheaper than lye, at any rate.

Here, it seems rather superfluous to speak about in seeing that each colony is in good condition for winter, if it has been run for comb honey. Here, it is sure to be in good condition for wintering, unless something is wrong with the management in not culling out the very poor queens in August, or in having very late or small swarms without helping out their brood chamber, or in having made too late nuclie. But it would seem from some references to the neccessity for seeing that such a colony has sufficient stores for winter, that the conditions may be different in the East. (But if the colonies have been run for extracted honey then care in this respect is necessary here.) A more pressing question for me has been to manage so that each colony in the fall is left with ample sufficient stores to carry it clear through the next spring, to the middle of June. Such experience as I have had inclines me to place more reliance on those colonies which stand on their legs from one season to another, than on those which are fed. It seems as if abundance of stores in spring, together with the absence of any but natural stimulants, and the least possible distubance, produces at least as good results as any other plan; in spite of the fact that Mr. C. Davenport, of Southern Minnessota, refers slightingly to that class of bee-keepers who don't feed. I may be mistaken about this, for I am not of those who "know" things, i e. "firmly believe" them, as it seems to me what is the fact is a trifle more important than what I may think about.

Abundance of stores—that brings up the issue of large hives. It may be true that large hives, and deep frames, are not so good for comb honey, if you

don't do anything but clap the supers on them. But why should you not do anything else? Can not intelligent management be as well applied to large hives as small ones? Some years ago I was much struck by the fact observed by some bee-keepers that at the end of spring, more brood is obtained from deep frames than shallow ones of the same length, and called attention to logical consequences. Since then, with ten or twelve deep-frame hives in the same yard with the ordinary size, it has been my experience too. This spring especially, their average strength is decidedly above that of the rest of the yard. Now, the wise men will tell us that those colonies may be stronger, but they won't produce any more comb honey than the ones on shallower frames, because the super is farther removed from the brood. But this consideration does not apply to the management of putting all comb honey colonies on starters at the beginning of the flow, for then all colonies are on the same basis, and the stronger they are, the more honey, other things being equal. "Yes it does" say those wise men "for later on the ones on deep frames will have a wider strip of honey to cross between the brood and the super." But see here; how do you explain the fact that after the start, just as much honey is obtained by tiering up with the empty supers added above the partially filled ones, instead of below them? Is not that contrary to the principle of having the place of storage immediately adjoining the brood? Is it not a fact, after all, that that principle (within, reasonable limits) only applies at the first of the season, so that with starters before them, the future depth of the brood-combs is no detriment at all to the building of surplus comb above? Managed in this way, therefore I see no reason to infer that there is anything in the way of utilizing the stronger colonies produced by the deeper frames in spring; therefore, nothing in the way of having hives large enough to contain all necessary stores from one flow to another, in such localities as permit making artificial swarms and hiving them on starters.

In other respects, however, it is a losing game to have an odd-sized frame in a community where everybody else has the ordinary size. I am therefore committed to the L. depth, but get around it in this way; supers of shallow frames, or imperfect sections of previous years, are kept on the hives at all times except when new comb honey is being produced. In spring, these constitute the reserve stores for the bees, and the combs below are filled clear to the top-bars and out to the cover with brood. When new honey begins, it is all deposited in these drawn combs, without any of it crowding the queen too soon, or being lost by the long time it takes to get ready to build comb in this locality. "But that honey might as well be in clean salable sections." Of course sombody will say that. I simply wouldn't get it, or a good part of it, by giving the bees nothing but an ordinary-sized brood-chamber and clean sections; I am just so much in by having the old drawn combs, as it just about saves possible expenditure for feed.

Denver, Colo.

THE FOLLOWING LETTER has been received from Secretary Mason:

Progressive Bee-keeper: If not too late for your August issue, will you please ask your readers who have any questions they would like answered at the Denver convention to send them to me as soon as may be convenient.

Yours truly.

A. B. MASON, Secretary.

Station B. Toledo, Ohio.

BOXWOOD

S. E. MILLER.

I am often asked whether I sow buckwheat for my bees. Many people who are not posted on the subject seem to think that an acre or two of buckwheat will furnish a large amount of honey. They do not consider that where buckwheat honey is produced the crop is almost universally grown as corn and wheat are in Missouri.

I believe that nearly all practical bee-keepers have agreed that there is no crop that it will pay to grow for the nectar it will yield only. We must therefore look to such crops as are worth raising aside from the nectar they will yield, and it is very doubtful whether buckwheat will pay as well as corn or wheat in Missouri, taking one year with the other.

But I am drifting from my subject and will become side-tracked if I do not get back on the main line. What I wish to bring before the reader is the protection of such trees and plants as we have growing around us.

We never see Missouri referred to as a boxwood state. Yet we find this tree scattered along the streams and on the hills bordering on the streams throughout a large portion of the state, and I have heard of a certain place where there is quite a forest of it. Perhaps there may be a number of such if we knew where to find them. I sometimes think that it is a sad fact that this noble tree which furnishes large quantities of delicious nectar should be felled and used up to furnish a supply of sections to the bee-keeper who should use every effort to protect it.

HOW TO PROTECT THE TREES

Every bee-keeper who owns or controls a tract of land wherein there are boxwood trees growing should use every means of protecting them. I own a small tract of land on which there are a number of trees scattered through the forest, and when working in the timber, whether getting out firewood, post or other timber, when I come to a boxwood, it is left standing, with the exception that where an old tree has been felled or blown down and a number of sprouts have come up. In that case I select the most erect, well shaped and if possible the largest sprout, and cut away all others. This gives the remaining one more room, and as it receives the whole force of the old roots it will in a few years be a blooming tree.

I am also leaving all thrifty young sugar maple trees in the hope of some day having a fine sugar orchard, but where a maple is crowding a boxwood of equal size, the maple must give the right of way.

Even small trees only an inch in diameter I trim up so as to make them grow shapely and cut from around them all other brush and such timber as is fit only for firewood.

In felling large trees I am always careful to avoid having them fall on a a boxwood if I can possibly do so. In this way I have been protecting the boxwood trees on my place for nearly ten years, with the exception of four years that I was not living on the place, but it was then in charge of my brother and at that time partner in the bee business.

This brings me to a coincidence which I will relate. I think it was in May, 1891. The bees were working nicely on white clover, (It bloomed nearly a month earlier than usual last year) and I remarked to my brother that if Boxwood done well I would secure a good crop. Oh! said he: Boxwood never amounts to anything here. He was right about it that time, for although it bloomed it yielded very little nectar, but with white clover and autumn flowers I secured what for my locality might be considered a good crop for this year. Willows, maples, honey-locust and others came along in

regular order and furnished sufficient for the bees to build upon, but when white clover's turn came it did not do its part. I think what there was of it was mostly young plants that came up late last fall and wintered well under the deep snow that laid so long last winter. but the plants were not of sufficient strength to give a full bloom. Things looked rather blue, but a bee-keeper must have hope as long as there is any hope. One day in late May or early in June, I was talking to my brother and said that boxwood promised well. Oh! boxwood don't amount to anything said he, but I kept hoping.

June 10th is the date in my almanac for bees to commence on boxwood, but they commenced on June the 9th and done good work on all favorable days until about the 20th. Little trees not over four inches in diameter; some of the same ones that I have husbanded in the past; were full of bloom and the roaring of the buisy bees in their tops was certainly good music to my ear. I say four because I have just been out and measured one. This is a sprout from an old stump, where a year or two ago there were three or four sprouts, and I cut away all but the best one. It is now full of the little white balls containing the seeds. Without boxwood the bees would have gathered little if any surplus.

As it is I have just extracted a fine lot of boxwood honey that is good enough for Roosevelt, King Edward, or even Aguinaldo.

Bluffton, Mo.

The following has been received from W. Z. Hutchinson which explains itself:

> A few days ago I sent you a copy of the program for the coming convention at Denver, when I sent you the program of the National convention. To day I have received the program for the Colorado State Bee Keepers' Association, which holds its meeting in a joint session with the National. In connection with the program that I sent you recently, it would be well to publish the following:

Program of 23rd Annual Convention of the Colorado State Bee-Keepers' Association, in joint meeting with the National Bee- Keepers' Association.

WEDNESDAY, SEPT. 3rd, 1902.

10.00 a. m.

Invocation.

Reading minutes.

President's address.

After the President's address, ten minutes will be given for members to offer suggestions or give notice of any business or discussion that they wish to bring before the convention. Come prepared.

11.00 a. m.

A four-cornered discusion, by four prominent apiarists, speakers limited to 10 minutes each. First subject "Association work and influence if good or bad, and why." Second, "Comb Honey Production, best hive and system and why." Third, "Extraced honey production, best hive and system and why." Fourth, "The most pressing need of our pursuit." General debate on the foregoing subjects speakers limited to three minutes except by consent of the convention.

Apportionment of temporary committee.

AFTERNOON SESSION.

1.00 p. m.

Question box.

1.30 p. m.

Unfinished business.

Report of committees.

New business.

2:30 p. m.

Election of officers.

3:00 p. m.

Paper: "The Bee in Literature." by F. L. Thompson.

Miscellaneous business.

The Progressive. Bee-Keeper.

A journal devoted to Bees, Honey and Kindred Industries.

FIFTY CENTS PER YEAR.

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

ABOUT SMOKERS.

G. M. DOOLITTLE.

WHICH IS BEST? I will leave that to the reader to decide. Nearly, if not quite, all of those on the market today are good; far in advance of anything we had in the seventies, the poorest of the present being better than the best of those offered at that time.

ABOUT FUEL. Almost anything will answer, from "buffalo chips" to hard maple, split fine, and from corn cobs to planer shaving. But I prefer any kind of partially decayed wood, to anything else. And I do not know as any of the different kinds of wood has the preference. I once thought that partially decayed apple wood was better than anything else, but of late years I do not see that it is enough better than others to single it out. It is good enough, and probably within the reach of a wider range of bee-keepers than any other one variety of wood.

HOW TO OBTAIN it is often the question with many, but I find no trouble in this matter. By always having an eye out for such things I generally have more on hand than I can use. If I see that which is good, as I am riding along the road, walking through the fields, I appropriate it to myself, store it up in the closet prepared for it, and during the leisure hours of winter cut it up to the right length, split it and store it away in barrels, so that when the busy season with the bees comes on, I have it by the barrel, already for the smoker. Then in dry weather, during the summer, if I find any "rubbish" of any kind in the bee yard, such as partially decayed pieces of boards used to keep the grass down, or anything of the kind, I just twist it up with the hands and put it in the smoker, as this saves me a journey to that barrel at the edge of the apiary.

ALL WOODS give off more or less creosote slowly as in the smoke, to that in time the barrel and nozzle of the smoker becomes all sticky, and at times clogged up with this bad smelling, sticky, tarry stuff, and it used to puzzle me to know what to do to get rid of it. I now fill the smoker with fuel, and when it gets well to burning; or at any time when I am through work with the bees for the present, and there is still some fuel in the smoker. I work the bellows rapidly, when soon there will be a flame of fire shoot out of the nozzle at each puff of the bellows. I keep on working the bellows till I see this creosote all burned up which is on any part of the outside of the smoker, the lower part of the smoker barrel generally getting red hot by this time. With a stick I now push off the nozzle, when I find the residue or ashes of the creosote will drop off all parts of the inside by jarring it a little by pounding upon the parts lightly with a stick. When cold the smoker is just as clean and free from stickiness as it was when it was new. But if it is made of tin the tin will all be burned off This does no harm except in looks; and to my eye the looks, after the tin is burned off is much nicer than was the tin all streaked up with black, tarry creosote. I probably burn mine out once a month, when in constant use during the summer.

HAVING THE SMOKER new, or just burned out, how shall we kindle the fire in it? Getting some coals from the

stove and putting them in the barrel, and on top of the coals the fuel, is a good way. But we are often away from the kitchen stove or the fire is out there, and so we do not depend on this. When any wood is found having a very soft decay, this is put aside in its proper place for "kindling." This will start at once from the touch of fire from a lighted match, when it is dropped into the smoker, and a little more of the kindling dropped on top of it, when the smoker is filled with the prepared fuel. By working the bellows a little now, we soon have a good smoke going, and if we economize, the fuel need not be renewed in two or three hours, if a barrel three inches in diameter or more is used. I advise the larger barrels on this account, as they save often filling.

BUT I HEAR SOMEONE asking "How economize?" At all times when we do not expect active or immediate use for the smoker, it should be partially laid down, or placed in such a position that the nozzle is just a little higher than base of the barrel, when the fire will keep alive for hours, with the waste of only a little fuel. If the day is windy it can be laid down nearly or quite flat, and yet keep the fire alive, so that a few puffs from the bellows will give all the smoke that is needed. In this way my smoker rarely ever goes out from morning till night, even though I do not work with it more than one-fourth to one-half of the time.

"WELL, WHEN NIGHT COMES, WHAT THEN? I used to dump the fire all out and the next morning start again, as given above. But I do this no longer. A stopper of wood is whittled till it will just go inside the nozzle, the same as a cork goes into a bottle. In fact a cork of the right size is just as good as anything you can have. Being through with the smoker for the day, the nozzle is corked and the smoker is lain down on its side on a piece of tin or sheet iron, so there can be no danger from fire, where it remains till I wish to use it again. If it has not been burned out for some time, it is well to loosen the nozzle from the barrel before laying it down, and then slightly put it on again, else the creosote will harden so that when cold it is hard work to remove the nozzle when next you wish to light it.

"WHY DO YOU DO THIS?" Why not let the thing be dumped, as was formerly the case? Ah, that refuse left in the smoker will take "a coal" quicker than anything else, so that all I have to do is to get a piece of the partly burned fuel out, "strick a match," and presto the whole in the bottom of the smoker is a "bed of embers." Add the fuel and you are ready for another day, in less than one-fourth the time it would take to start with new fuel. This is one of the items which I have lately learned, and one of the most valuable of the many little things necessary in apiculture.

"YES, BUT WE ARE AT THE OUT APIARY, where there is no building, and where the wind sweeps with a vengence, on some winday day when necessity compels us to work. What shall we do then? In this case you will take a small vial, one that will hold two or three ounces, and before starting for the out apiary, fill it with kerosene oil, corking tightly. Arriving at the apiary, set apart a place for this vial, and always keep it in its place. Now take out a piece of partly burned fuel and pour four or five drops of the oil on the charred end of it. Set the smoker so that the open end of it is up, and yourself on the windward side of it, holding the oiled end of the stick of fuel down inside of the barrel. Now "strike" your match, and quick as thought plundge it down in the smoker so it touches the oiled end of the fuel, and there you are, with a fire inside which will astonish you so quick-

ly that you will drop the match and fuel before you know it, and the whole thing is on fire and ready for use as soon as you can put in a little more fuel. And now dear reader, if you have followed me and will put this in practice you will love your smoker as you never did before.

Borodino, N. Y.

THE MOST WONDERFUL BEE-KEEPERS IN THE UNITED STATES.

Some Remarkable Yields; what can be Done with Artificial Pasturage; Double-decker Strong Colonies.

BY J. L GANDY.

I give herewith some ideas obtained during my thirty years' experience as a bee-keeper, the last seventeen of which I have handled them as a commercial pursuit, keeping during this time from 500 to 3000 colonies, 100 of them being in my home apiary, of which I will more particularly write. During the thirty years I have experimented with about all kind and sizes more on the line of hives and some points of management wherein I differ radically from the average bee-keeper. At the outset I wish it understood that I have no hives for sale, and am writing simply as a bee-keeper.

I claim by my method of handling, of which I can describe only some of the principal features, bees may be made to produce double the ordinary surplus and perhaps more. I assume that the reader is a bee-keeper who has plenty of nectar-secreting plants in his neighborhood—as any section can be made a

good place for bees at an expense of $60 for catnip and sweet clover-seed, and thas sum is less than the profit I derived from a single copy last year. Much of this increase is attributable to the plants; but I am confident that my particular methods helped largely to bring about the greater yield.

These methods I advocate are for the use of the up-to-date bee-keeper; the lazy, carless operater will be in no way benefited by changing. Usually a man successful in other pursuits will be a successful bee-keeper, while he who fails in other pursuits will be as likely to fail with bees. Knowledge and industry are absolutely necessary in apiculture, and one should not attempt the handling of even a few colonies without studying a good text-book on bees, and subscribing for and reading at least one reliable bee journal. One reason for this is that the bee industry is in its infancy, and many important discoveries are being made from time to time. The importance of this advice can not be overestimated.

Many will doubtless wish to know what I may consider constitutes an up-to-date bee-keeper, and I will, therefore, give a pen picture which I hope will reveal some of the characteristics of this only too rare individual. You make your visit in June, and long before you reach his residence you will find all roads thickly set to sweet clover catnip, the fragrance of which has attracted the bees who are flitting industriously about among the sweet-scented blossoms. Upon arriving at his home you will find him busily engaged in putting on supers and hiving swarm; but he will find time to greet you warmly, and will evince great delight in showing you through his apiary. You will find his family enthusiastic on the subject of bees, and at the dinner-table you hear much of the blessings of apiculture, which enables the family to purchase all household neccesities from the sale of honey. The host will tell of having twenty-five acres of sweet clover, which he cuts for hay, and the same acreage of catnip, which will enable him to keep 3000 colonies instead of the usual 100. From the product of these colonies he hopes to be able to purchase the next season an adjoining $10,000 farm.

It is not necessary to describe the lazy, careless bee-keepers, as he is well known. If you would devote the time he now spends in writing to the bee journals of his failures, to the sowing of sweet clover and catnip seed he would be much more useful to the community. He will tell you that he does not take a bee journal, for the reason that his bees do not pay, and he cannot afford to, not realizing that one of the main reasons why they do not pay is his own lack of knowledge in handling.

When I started bee-keeping on a large scale my neighbor bee keepers did not average a surplus yield of over 50 pounds per year to the colony. I immediately set about improving the bee pasture, and my average yield of surplus for eleven years was 120 pounds to the colony, and for the last six years it has been 300 pounds.

My increase has always paid all expenses, including 10 per cent interest on the investment. I produce chunk, extracted, and section honey, and sell all at 15 cents per lb. in this and neighboring towns. My net profit for eleven years was a little over 400 per cent, and for the last six years it was a little over 800 per cent. Last year my home apiary, of which I am now writing, 75 colonies (spring count), gave me 407 lbs.to the colony.

Some may wish to know how I came to go into the bee business. For their enlightenment I will state that, about seventeen years ago, by financial reverses I became indebted $25,000; and as misfortunes never come singly,

my health also failed until I thought could not follow my professional pursuits longer. With a view of regaining my health and paying these debts I re-embarked in the bee business, in which I had had enough previous experience to be certain of good results. So in 1884 I began by the purchase of all bees I could get, paying therefore from $1 to $10 per colony. By increase and purchases, by 1890 I had 500 colonies, and 2000 in 1895, keeping on until 1898, when the colonies numbered about 3000, nearly the number I now have. By 1892 I had every dollar of my indebtness paid out of the profits from my bee industry, and since that time I have invested the profits of this branch in farms, averaging in price from $5000 to $12,000, as the profits for each year. Last year I purchased $40,000 worth of land, and $15,000 of this amount came from the sale of honey and bees. All the land I purchased prior to 1898 has more than doubled in value, while that bought since has advanced fully 30 per cent, and has paid in rent, since I owned it, fully 8 per cent. I now own 20,000 acres of fine farm and fruit lands, which, at a fair valuation, is worth $60 per acre, besides large tracts of wild lands in Dakota, Texas and Kansas and considerable city property. None of it is for sale, as most of it pays a fair interest on a much larger price. Now it may be seen why I am in the bee business. I have regained my health, and will continue handling bees right along.

But, to return to the real subject. The first eleven years I used small hives of various patterns; but for six years I have used nothing smaller than a ten-frame plain hive. For surplus I use one hive above another with empty combs, for extracted honey. For chunk honey I use the thin brood foundations wired. I use no honey-board, queen-excluders, nor separators, but allow the queen to breed wherever she desires, and in that way get fully four times as many bees as you get in the eight-frame hive where a queen excluder is used. Bees even in an eight frame hive, generally use the two outside frames on each side of the hive for honey and pollen, and this leaves but four frames for brood-rearing. This, I claim, will not produce one-sixth as many bees as the colony should contain. I went through a colony having on six ten-frame hives last summer, and it had brood in 32 frames. That hive produced over 500 lbs. of surplus, while the same colony in an eight-frame, with a queen excluder used, would not have produced to exceed 100 lbs. of surplus. A queen excluder will exclude the queen, and will also to some extent bar or greatly hinder a well fillen bee. By using drawn combs we have very little use for separators. I don't use them; and when I occassionly run out of drawn combs I resort to foundation; with drawn combs bees will make about twice as much honey as with foundation. I was induced to use large hives by some circumstances which I will relate.

I helped a man cut two bee-trees seven years ago, where the bees had been occupying the trees for four years. He was certain when they went into the trees, for both stood in his yard. Both had the space in the trees full of honey, giving us 516 and 73 lbs. respectively; and the same year I had a man (who was managing an out apiary for me while running a store) put up 50 boxes in trees to catch absconding swarms. Among them he put up several sugar-barrels, some cracker-boxes, and some nailkegs. We noticed that the barrels and large boxes were first occupied. One colony in a barrel we left on the ground in the woods until the close of the season, and it gave us 300 lbs. of fine honey. Eight years ago I had 56 swarms come out in one day; and although I had four assistants helping hive them, seven or eight

swarms clustered together and resisted all efforts to separate them, so I had two ten-frame hives and two supers made, and placed them one above the other, leaving the two openings. Now, this colony finished up 365 sections of honey after filling the two hives, while none of the other colonies hived that day gave a single pound of surpuls. If I put half a dozen hives on a colony I leave an opening for each hive so that the bees will usually work from each hive, and I seldom have a swarm from colonies thus treated. With those I want to swarm I use the common super with sections for surplus honey. I had a colony last summer that had five twelve-frame hives on full of honey. It commenced to swarm, and I immediately set two of them off and put on another hive with empty combs, also taking out a few frames of honey from one of the hives. I had set off and put in frames of foundation, and they immediately quit coming out, and those that were out came back and went to work as though nothing had happened. For section honey I use the wide frame holding eight frames. In a heavy flow a ten or twelve frame hive will be filled in a remarkable short time; and then if another is not added they will swarm, no difference how many hives of honey they have on. In a heavy flow I have known them to bring in 20 to 30 pounds in a single day, while those in an eight frame hive were bringing in 7 to 19 lbs. per day. I have eight frame hives continually in my apiary for experimental purposes to show the great difference to other bee-keepers.

I had two last year, one with a queen-excluder and the other without in the same yard. Where others made 400 lbs., this one with an excluder gave me 60 pounds of chunk honey, and the one without produced 110 lbs. I had another that did not give a single pound of surplus, although they had a fine queen; but they were weak in the spring, and had very poor combs in the brood-nest, which I did not discover until the heavy flow was over.

Now, of course you will ask about the disadvantages of my system, and I will tell you. In breeding queens their full capicity they sometimes fail the second year, and are usually not good atter two years, although I have had some very good at three years of age. I always change them by inserting a new queen whenever they begin to fail, without regard to age.

In conclusion I will say a few words about selling honey, as that is about as important as its production. Of course, I could sell my honey at 5 cts. per lb. and make plenty of money out of it; but I think it is really worth 15 cts., and is cheaper at that price than anything else of its kind that we buy to eat; and if I sold at that price my neighbors who keep bees, and many of them very poor, would have to go out of the business, and that would create a monopoly. I aim to buy all the honey produced I can hear of for miles around, and pay 15 cts. cash per lb. for it—just what I sell it at—and this prevents farmers running it in and glutting the market. Storekeepers will try to buy honey, especially of small producers, just as cheap as they can. Now, I make a uniform price for each kind, and furnish a good article, and never have any complaints. I have my 60-lb. cans made to hold 64 lbs., and when a person takes 20 of them I give them an extra can—they pay for only 60 lbs. in a can. I usually sell comb honey by the case, and guarantee 20 lbs., but I never fail to get in at least 22 lbs. I always give liberal weight and have every kind of honey in my office, and invite all who come in to inspect it and eat all they want, especially women and children. This will create a taste for honey, and children will insist on

their parents buying it. We make cakes out of honey, and can much fruit with it, and this sets an example which others will follow. In selling honey we can afford to be liberal, as it comes to us as a gift, just like finding it, and why not distribute it? I have found nothing is lost by liberal methods, and it will greatly help to counteract the falsehoods about honey adulterations. I always furnish ministers honey free, and editors the same, and then I oftentimes have the latter copy articles in their papers from the A B C of Bee Culture. Of course, a merchant who buys honey of a commission firm usually has to sell on a close margin, and he can not afford to be very liberal; but the producer can give away large quantities without any loss. I have always thought that every dollar's worth I gave away brought me two in return.

Apiculture is a pleasant, easy, honorable, and healthy business, and is conductive to long life and happiness, not only to yourself but to the human race.

I look upon the apiarist as a benefactor of the human race, as his teachings to the people warning them of the dangers of using refined sugars certainly entitle him to the respect and esteem of the humanitarian. I have practiced medicine nearly forty years, and have closely observed, and I never knew a consumer of honey or bee-keeper to die from that dreaded malady, Bright's disease of the kidneys. There can be no doubt that the use of honey instead of sugars tends to prolong life; and I have known many invalids, effected with supposed incurable disease, to recuperate and get well under a diet composed largely of honey. With knowledge and industry the road to success for the bee-keeper is an easy one to tread, and will lead to health, wealth, and happiness.

Humbolt, Neb.

THE KICKER.

It is said that the Creator
Had some useful end in view
When He fashioned the mosquito,
That so pesters me and you;
And also that the little flea
Makes lazy men move quicker;
But what is wonderful to me,
Is why He made the kicker.

The kicker never finds the time
To promote a scheme or measure,
But in tearing down what others build
He finds his greatest pleasure.
He talks of unworthy motives,
Selfishness and false pretence,
And always sees a nigger
In the wood-pile or the fence.

He waits until the plan is made,
Then, like a child at play,
Declares he'll surely quit the game
Unless it's played his way.
He forgets that a true American
Should yield with due respect
To the will of the majority
And the measures they elect.

'Tis not for me to question nature
But what justice can you see
In letting the pesky kicker live,
While you crack the little flea?
And if there is hereafter
Provided for the human race,
And the kicker goes to heaven,
I would prefer the other place.

Lodge Record.

NATIONAL BEE-KEEPERS CONVENTION.

Program of the 33rd annual convention of the national Bee-Keepers' Association, to be held at Denver, Colorado, Sept. 3, 4 and 5, 1902:

First Day, Wednesday, Evening Session.

7:30 P. M., Invocation, Music.

Addresses of Welcome by President Harris, Mayor Wright and Governor Orman.

Responses by President Hutchinson, Secretary Mason and Director Miller.

8:30 P. M., "Bee-Keeping from the Atlantic to the Pacific, as seen through the Camera and Stereopticon," by E. R. Root, Medina, Ohio.

Second Day, Thursday, Morning Session.

9:00 A. M., Music.

President's Address, "The Future of

Bee-Keeping,"

Discussion.

10:00 A. M., "Which is the most hopeful field for the National Association?" by Dr. C. Miller, Marengo, Ills.

Response by Rev. E. T. Abbott, St. Joseph, Mo.

Discussion.

11:00 A. M., Question Box.

Second Day, Thursday, Afternoon Session.

1:30 P. M., Music.

"Reporting of the honey crop, when and how it should be done," by C. A. Hatch, Richland Center, Wis.

Response by Frank Rauchfuss, Denver, Colo.

Discussion.

2:30 P. M., "Bee Keeping lessons that may be learned from the word locality," by H. C. Morehouse, Boulder, Colo.

Response by R. Root, Medina, Ohio.

Discussion.

3:30 P. M., Question Box.

Second Day, Thursday, Evening Session.

7:30 P. M., Music.

"The outside and inside of a honey bee." Illustrated by the Steropticon. By Prof. C. P. Gillette, Ft. Collins, Colo.

Third Day, Friday, Morniwg Session.

9:00 A. M. "Selling Extracted Honey at Wholesale—How to get the Best Prices." By J. F. McIntyre, Sespe, Calif.

Response by T. Lytle, Manzanola, Colo.

Discussion.

10:00 A. M., "Putting up extracted honey for the retail trade." By R. C. Aikin, Loveland, Colo.

Response by G. W. York, Chicago, Ills.

Discussion.

11 a. m., Question Box.

Third Day, Friday, Afternoon Session.

1:30 p. m., Music.

"Managing out-Apiaries for Comb Honey," by W. L. Porter, Denver, Col.

Response by M. A. Gill, Longmont, Colo.

Discussion.

2:30 p. m. Question Box.

3:30 p. m. Trolly ride, "Seeing Denver."

Third Day, Friday, Evening Session.

9 p. m. Banquet.

A. B. MASON, Secretary.

GOOD THINGS IN THE BEE-KEEPING PRESS.

SOMNAMBULIST.

From the St. Lawrence News we clip the following:

Bee-keepers are not encouraged at what they see in their hives and fears are entertained that the honey production this summer will be very much below the average unless the conditions of the weather change very soon. June has been unfavorable for honey-making, the frequent rainfalls, cool temperature and cold nights having made the little workers rather sluggish, and their cells are being fitted slowly. Even though July and August bring forth sunshine and warmth every day the bee's business season will be short, and it cannot make up for lost time to the extent of as large a production as in former years.

The fact that the News does not belong to the Bee-keeping Press does not weaken either the truth or value of the information.

In "Stray Straws" (July 1st Gleanings) we find:

Here's the last half of June, and instead of hustling to get on aditional supers, I've been hustling to feed. That tells the story here. [The weather is cool, and has been for a week back. A week ago, or a little over, we had ideal honey weather. There is still a chance for the bees to get a crop providing we can only have warm weather for a change. We have had rain—too much of it—and weather so cold that we have been obliged to start our furnace fires at our homes;

and even some of the rooms in our factory have had to be warmed, when a week ago the problem was how to cool them off so the employees could work. It is these rapid changes—fearful extreems—that is playing havoc with the honey business this year; and the situation is the more serious because these conditions have prevailed over almost the entire clover and basswood belt of the United States.—Ed.]

The July 15th number reports slightly more encouraging. A straw reads:

You've had ideal honey weather, even if not for long, at Medina. Different here. Up to July 21 wore exactly the same coat, pants and vest I wore all winter, discarding underclothes. I've fed nearly a thousand pounds of sugar to keep the bees from starving, and breeding has been nearly at a standstill. July 2 came a sudden change; thermometer ran up to 86 degrees; next day 96 degrees; and this morning, July 4, it bids fair for a schorcher. My belief is, after reading hundreds of letters, that some sections will yield honey while others will have a bare crop.

From a private letter received from Arizona, from one who is in position to know, we learn that the weather, even for Arizona, is exceptionally warm; and unless something unusual happens the honey crop will not exceed ten to twenty per cent of an ordinary year. The probabilites are that there were not enough snow in the mountains to give sufficient water for irrigation during the growing time of the year.

Two or three letters from Colorado indicate that the season in that State will not be as good as usual. Some estimate half a crop. Southern California, from the very latest advices, is not going to make very much of a showing. It appears that there will be a scarcity of Western honey no matter what the clover belt may develop.

Doolittle in July Progressive says:

"Up to this date, the year 1902 has been the most peculiar, and the hardest on any bees of I have known during the 33 years in which I have kept bees."

And E. Archibald of Los Angeles Co. California informs us:

Bee-keepers say they will be lucky if they do not have to feed.—American Bee Journal.

This is the news from New York to California with intermediate points thrown in for good measure, but for the sake of variation and to illustrate how poorly the general public are posted, let me give a little of the chat for some of my salesman.

These men take the honey at a stated price and after selling return cash for the same.

One writes, "Owing to such a favorable prospect for a great crop, honey should be two or three cents cheaper this year," and another, "Whats the price per case this year? I cannot sell for any more than I gave you last year, so I must have some commission; you will have to let me have it cheaper."

Question? Did you ever go to a commission house to dispose of honey that they did not tell you that an unusually large crop had been secured?

Is it a trick of the trade or of the imagination or a combination of both?

As to this particular district out of five yards one gave a yield of honey, it being from Linn.

With a crop so light and no rush to keep me awake is it any wonder that Dr. Miller caught me napping?

He wakes me all of a sudden by saying:

"You know very well, Sammy, and so do I, that if a colony should be moved during these warm days, the colony would be depleted of about its entire field force, unless moved outside the range of its usual flight."

You see the printer has given me a

new name. Whats in a name anyway? (as the shoe fits it was evidently meant for me). Hereafter I propose to do more clipping, as well as more curbing of the unruly member.

To begin I will now give the entire clippings from Gleanings relative to the blunder referred to.

Stray Straws May 1st Gleanings:

Mr. Editor, you say you marked locations, so that, when you put out bees a month later, you can put them on same stands. I wish you would change location of a few, so as to see just how much harm would come of it. Some say they will get mixed if put on wrong stands, even after being in cellar all winter. It never seemed that my bees clung so tenaciously to old locations. This year I set a colony near the cellar on taking out. It flew that day, and, after standing there a week, I took it down to the apiary. The first day it flew, perhaps the first ten days after its first flight, it seemed to mark its locality anew, and I don't know that any bees were lost. [Perhaps you are right; but we determined to be on the safe side; but if bees after a confinement of ten days will mark their locations anew, then the fact is a matter of importance on the score of convenience if nothing else.—Ed.]

A. I. Root's tales about his cabin home in the forest makes one feel cool and contented even when only reading them. What a lesson they are to many similarly situated, in earnest, that is, in the beginning of the battle of life.

Could they but take things as he does, in his play, how different many lives would be. And he is in real earnest about a part of it at any rate, regarding strength and health, who would not be?

He is teaching, by example, the best of all methods, that to work is happiness. Be he rich or poor no idler is ever happy.

The idle rich must needs kill time and to accomplish the same plunges into all sorts of soul-deadning dissipations, while the idle poor loafs in the sunshine or tramps through the world begging bread from door to door. Are either happy?

Sojourner tells us about Mr. Stollmeyer, the "Asphalt King," who evidently has solved the secret of happiness.

Though a millionaire and nearly ninety years of age he has taken up bee-keeping for pastime.

"He prefers to keep himself busy with an innocent hobby which affords him interest and keeps him from rustling out." And his example might well be emulated by other wealthy men who engage in race-horse breeding and other very expensive hobbies that in themselves have very little to commend them. I believe one of the Vanderbilt family is following a similar course on his estate in North Carolina: also the Duke of Bedford, in England. If more of our wealthy men were to follow in their steps we should hear very little about anarchism.

Thank you Dr. for the timely correction and for the kind invitation to "come around and spend the evening." I could truthfully add how "highly honored I feel, etc, were it not that you by your kindly manner of correction and I by my habitual manner of writing (be it ever so honest or natural) are in danger of that dreadful club "suavity."

Hope the above explanation will prove satisfactory. Yet another interesting "Straw" is:

FARMERS BULLETIN No. 18 says of sweet clover: "As a restorative crop for yellow loam and white lime lands this plant has no superior; and for black prairie soils it has no equal." [In some parts of the great West there are what are called "alkali lands." Irrigation

for a series of years has forced the alkali out of the soil to the surface, with the result that it kills every thing except pear-trees, salt-weeds, and sweet clover. I know a spot in Western Colorado—perhaps the finest location in the world—where there are hundreds and perhaps thousands of acres of alkali land covered with nothing but sweet clover, for nothing else will grow. A bee-keeper whom I know located in that vicinity struck a bonanza, for no ranchman or farmer will invade his territory—at least not till all the other available land is taken up. The time may come, when land is scarce, when the ranchman will be called on to use the alkali land and grow sweet clover for a hay crop. Then, perhaps, the world will wake up and discover that it is not an enemy but a friend.—ED.

In Live Stock Indicator we find the following:

YELLOW SWEET CLOVER.

Mr. Editor:—I send you a plant that is growing by the side of the railroad in this city. What is it and what is it good for? My hogs eat it readily.
Superior, Neb.

The plant enclosed is what is known as Yellow Sweet Clover or Yellow Melilot. This plant grows in waste places over large areas. It is not considered to be of much economic value, owing to the fact that the stems become very thick and woody. Where it thrives as a rule some of the better clovers will succeed well, which largely accounts for the fact that yellow clover is scarcely if ever sown and used for a crop. It very much resembles the white, sweet clover which is so common on roadsides. This clover has the ability to take nitrogen from the atmosphere and store it in the soil, and because of this characteristic there are many persons who make no attempt to bring about its destruction.

Among the editorials this appears

BEES AT THE WORLD'S FAIR.

We have received from the General Press Bureau of the World's Fair the following, which will be of interest to bee-keepers:

"The World's Fair management, in their plan and scope of the Exposition, declared they wanted live exhibits; so, in casting about for plants to make our exhibit conform to that idea we interested one of our wealthiest and most public-spirited citizens, Mayor Swink, of Rocky Ford. Mr. Swink is an apiarist, and he has perhaps, the largest bee-plant in America. He is going to bring his bees to the World's Fair, and they will work here from the time the Exposition opens until it closes. Mr. Swink's plan, which will cost fully $10,000 of his own money, is to bring to St. Louis enough bee-hives to construct in miniature a counterpart of the Colorado State-house at Denver. The bees will then be turned out to find material for honey-making in the country surrounding the World's Fair ground. It will require about 640 hives to construct the little State-house, and in it abou five and one-half million bees will work. It will be a great exhibit."

There is also an account of a second millioniare bee-keeper which is remarkable. J. L. Gandy gives an account of himself and his doings. It is claimed that he has made as much as $25,000 in two years from bees.

Among his points are: "Any section can be made a good place for bees at an expense of $60 for catnip and sweet clover seed."

"Usually a successful man in other pursuits will be a successful beekeeper. While he who fails in other pursuits will be as likely to fail with bees."

"Knowledge and industry are absolutely necessary in apiculture."

"If the lazy beekeeper would devote the time he now spends in writing to the bee journals of his failures, to sowing sweet clover and catnip seed he

would be much more useful to the community."

(Oh why I almost felt the whiz of that missile! Wonder if he could have possibly refered to Sommy?)

He states his increase has always paid all expenses, including 10 per cent interest on the investment.

Says: "I produce chunk, extracted and comb honey, and sell all at 15cts per lb. in this and neighboring towns. My net profit for eleven years was a little over 400 per cent, and for the last year my home apiary, 75 colonies (spring count,) gave me 407 lbs. to the colony."

Further states that in 1884 he was in debt $55,000 and by 1892 he had every dollar of it paid from his bee industry. He gives his methods as follows:

For surplus I use one hive above another with empty combs for extracted honey. For chunk honey I use the thin brood foundations wired. I use no honey board, queen excluders, nor separators, but allow the queen to breed where ever she desires, and in that way get fully four times as many bees as you get in the eight frame hive where a queen excluder is used. I went through a colony having on six ten frame hives last summer, and it had brood in 32 frames. That hive produced over 500 lbs. of surplus, while the same colony in an eight frame hive, with a queen excluder used, would not have produced to exceed 100 lbs. of surplus.

A queen excluder will exclude the queen, and will also, to some extent bar or greatly hinder a well filled bee.

By using drawn combs we have very little use for separators. I do not use them and when, occasionally, I run out of drawn combs I resort to foundation.

With drawn combs bees will make about twice as much honey as with foundation.

I was induced to use large hives by some circumstances which I will relate: I helped a man cut two bee trees seven years ago, where the bees had been occupying the trees for four years; one gave us 517 lbs and the other 73, both had the space in the trees full of honey. The same year I had a man (who was managing an out apiary for me while running a store) put up 50 boxes in trees to catch absconding swarms. Among them he put up several sugar barrels, some cracker boxes and some nail kegs. We noticed that the barrels and large boxes were first occupied. One colony in a barrel we left on the ground until the close of the season and it gave us 300 lbs of fine honey.

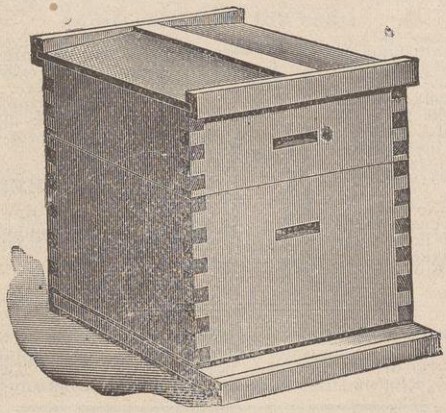
Eight years ago I had 56 swarms come out in one day and although I had four assistants helping hive them, seven or eight swarms clustered together and resisted all efforts to separate them, so I had 2 ten-frame hives and 2 supers made, and placed one above the other, leaving the two openings. Now this colony finished up 365 sections of honey after filling two hives, while none of the other colonies hived that day gave a single pound of surplus. If I put a half dozen hives on a colony I leave an opening for each hive, and I seldom have a swarm from colonies so treated.

In selling honey he recommends liberality, and says "I have always thought that every dollar's worth I gave away brought me two in return." He invites all who come to eat of honey and furnishes mimisters and editors free of charge.

With a prospective $10,000 display at the World's Fair and millionaires as bee-keepers, for a fact, bee-keeping can scarcely be regarded as small potatoes. And men at the head of or taking the lead in business of such dimension have not waited to see the procession pass by and been satisfied in catching the dust alone but have been a part of the procession and that a leading part.

PLEASE mention the "Progressive" in answering advertisers.

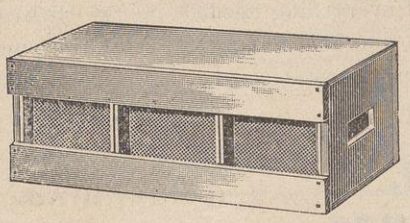
Nothing so Profitable on a Farm



...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.



Topeka Bee Supply House.
Topeka, Kas.

Advanced Bee Culture

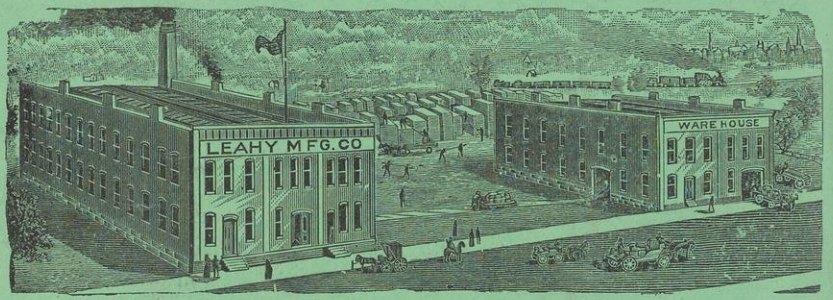
IS a book of nearly 100 pages (the size of the Review) that I wrote and published in 1891; and I will tell you how I gathered the information that it contains. For 15 years I was a practical bee-keeper, producing tons of both comb extracted honey; rearing and selling thousands of queens, reading all of the bee books and journals, attending conventions and fairs, visiting bee-keepers, etc., etc. Then I began publishing the Review, and, for several years, each issue was devoted to the discussion of some special topic; the best bee-keepers of the country giving their views and experience. "Advanced Bee Culture" is really the summing up of these first few years of special topic numbers of the Review; that is, from a most careful examination of the views of the most progressive men, and a thorough consideration of the same in the light of my experience as a bee-keeper, I have described in plain and simple language what I believe to be the most advanced methods of managing an apiary, for profit, from the beginning of the season through the entire year.

A new and revised edition, which includes the improvements of the past ten years, will be out June 1st. It will be as handsome a little book as ever was printed. The paper is heavy, extra machine finished, white book, and there will be several colored plates printed on heavy enameled paper. For instance, the one showing a comb badly affected with foul brood will be printed in almost the exact color of an old comb. The cover will be enameled azure, printed in three colors.

Price of the book, 50c The Review for 1902, and the book for only $1.25. You can send in your order now, and the back numbers of the Review for this year will be sent at once, and, as soon as the book is out, a copy will be mailed you.

W. Z. Hutchinson, Flint, Michigan.

MANY IMPROVEMENTS THIS YEAR.



We have made many improvements this year in the manufacture of bee supplies The following are some of them: Our hives are made of one grade better lumber than heretofore, and all that are sent out under our new prices, will be supplied with separators and nails. The Telescope hive has a new bottom board, which is a combination of hive stand and bottom board, and is supplied with slatted tinned separators. The Higginsville Smoker is much improved, is larger than heretofore, and better material is used all through. Our Latest Process Foundation has no equal, and our highly polished sections are superb indeed. Send 5c for sample copy of these two articles, and be convinced. The Daisy Foundation Fastener—well, it is a *daisy* now, sure enough, with a pocket to catch the dripping wax and a treadle so it can be worked by the foot. Prices as low as conservative, considering the big advance in raw material. If you have not received our new catalogue, send for it at once. Sample copy of the PROGRESSIVE BEE-KEEPER free. Address,

LEAHY MFG. CO., Higginsville, Mo. East St. Louis, Ills. Omaha, Neb.

THE BEST PAINT FOR BEE HIVES

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.

PRICES.

One quart	$ .55	One gallon	$1.60
One-half gallon	1.00	Five-gallon can. per gal	1.50

LEAHY MFG. COMPANY,
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