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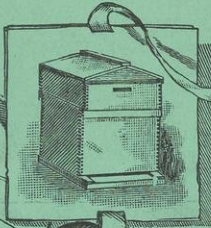
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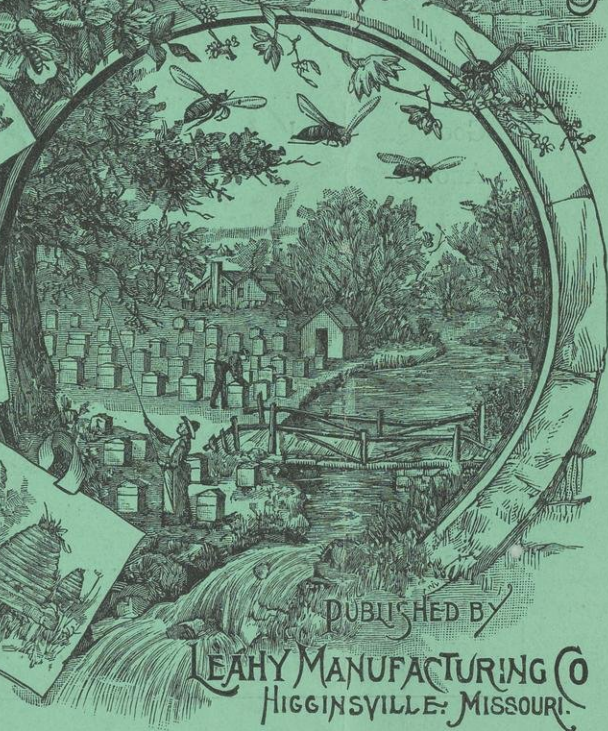
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# PROGRESSIVE BEE-KEEPER

A JOURNAL DEVOTED TO BEES, HONEY AND KINDRED INDUSTRIES.



PUBLISHED BY  
LEAHY MANUFACTURING CO  
HIGGINSVILLE, MISSOURI.



September 1904.



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# The Progressive Bee-Keeper.

A Journal Devoted to Bees, Honey and Kindred Supplies.

VOL. XII.

HIGGINSVILLE, MO., SEPTEMBER 1904.

NO. 9.

## Good Things in The Bee-keeping Press.

SOMAMBULIST.

Frequently we discover good things "in our neighbors field's" outside of beedom, here is an article from the Kansas City Star and Times, which is interesting reading for bee-keepers as well as others.

### THE MAKERS OF HONEY.

How doth the little busy bee  
Improve each shining hour  
In gathering honey all the day  
From every opening flower.

"Last week a crop of honey aggregating 2,100 pounds was taken from fifty hives on a farm north of Rolla, Mo. The whole lot was bought by a grocer in Rolla, who paid for it nine and one-half cents a pound. But never mind that. In contemplating more than a ton of honey all in one bunch the value of the product is the most irrelevant thing to consider. What ought to completely take possession of the mind is the wonderful beauty of the activity that results in the accumulation of Nature's choicest nectar by the hundred weight.

Here is an industry that sends forth no rude or strident sounds to mar the sweet quietude of the meadows and orchards. The droning of the little toilers is dreamy and soothing, as they take their way through the flowers. They are arrayed in the finest of silk and the most delicate gossamer. The dyes of Tyre and Sidon were not equal to the coloring of their fairy vestments. Nothing ever soils these fine garments but the rich pollen of the

deep flowers. The touch and the footsteps of the honey makers are so light that they leave no trace on the tiniest and the most fragile blossom. The bees hum their contented melodies while they gleam in the meadows or busy themselves in the tree-tops. They know not the deafening sound of the hammer and they are strangers to the imprecations of disaffected wage-earners. The walking delegate, the strike agitator, the creator of the boycott—none of these has ever invaded the realm of the little busy bees. There is a union that is from everlasting to everlasting. It began when the morning stars sang together, and will end only when the heavens shall be rolled together as a scroll.

The makers of honey bid defiance to trusts and commercial combinations. No earthly power can bring under the sway of any monopoly the sunshine and the dew, and all of the countless flowers that store up their dainty laboratories the sweets of the light and of the air and of the moisture that bless the earth. The tireless wings of the honey makers cannot be pinioned, nor can greed set any limit to their wide domain. Well may the honey of Hymettus stand as a synonym of all that is choicest in the products and utterances of the poet's fancy or the orator's moving eloquence. The essence of flowers, the distillation of heaven's radiance—what are so transcendent as these?

Let the sons and daughters of men who are troubled and worn with toil; who are distracted with the inexorable struggle for existence; who are weary

of the din of competition; who seize moments now and then to think yearningly of quiet and sunny fields or shady groves, consider the ways of the little honey makers, and be wise unto the assertion of an unquestioning faith in the wisdom and beneficence of a power which can devise an industry of such wondrous skill and beauty as that of the little bees."

Green's Fruit Grower and Home Companion, furnishes the next item:

"It's bees now. Word comes from Jersey apiaries that owing to the severe cold winter the honey in the bee hives froze solid, cutting off the supply of subsistence from the bees, and that in consequence the honey makers in tremendous numbers have starved to death. Jersey stories in New York are usually taken with a pinch of salt, but the question naturally arises, does honey freeze so solidly that it cannot be eaten by bees? Those in outlying regions interested in bee culture can thresh the question out amongst theme. Meanwhile, New York will be looking for a "corner" on honey this summer, no matter how hard remaining bees may work."

As many bee-keepers are interested in fruit, and if not they are undoubtedly interested in their individual health, the following in regard to fruits, taken from "Christian Work," will probably be acceptably:

Fruit alone will not sustain life for any great length of time, but helps to furnish a variety in the diet. It stimulates and improves appetite and digestion, relieves thirst and introduces water into the system, acts as a laxative or astringent, stimulates the kidneys and supplies the organic salts necessary to proper nutriment. If the medical uses of fruit were understood and care taken to use the appropriate kinds much less medical

treatment would be needed.

Among the laxatives are figs, prunes, dates, nectarines, oranges and mulberries.

The astringents are blackberries, dewberries, raspberries, pomegranates, quinces, pears, wild cherries, cranberries and medlars.

The kinds used for diuretics are grapes, black currants, peaches, whortleberries and prickly pears.

The refrigerants are red and white currants, gooseberries, lemons, limes and apples."

The American Bee Journal presents the following to its readers, from "The Packer." R. A. Burnett gives the lesson and he is well qualified to teach this particular branch, he having been connected with a leading Chicago wholesale house for many years, which each year handles tons of honey.

"It is becoming better understood amongst the consuming classes that unripe honey is not palatable; therefore the chief thing now in selling honey is to get the aroma as well as appearance; especially is this true when Wisconsin, or any of the States east of the Missouri river, seek to put their honey in competition with that west of them. The trade is beginning to discriminate more and more each season with regard to flavor of honey. If a producer is known so to manage the product of the bees as to get this aroma to the utmost, he will stand a better chance of marketing at a little higher price than his neighbor; certainly it will be taken in preference, and where there is an abundance of honey, as there was last year, this is quite an advantage.

"People buy honey for the relish; therefore, the ripening of honey and not exposing it to the atmosphere in such a way as to eliminate this delicate aroma are essential in getting a

honey that the markets wants. This volatile oil distilled by the blossoms which secrete the nectar is, therefore, the chief factor in selling honey produced in the Middle States. This fact applies equally to extracted and comb honey.

"We are of the opinion that it is more difficult to retain this aroma in the extracted from than in the comb, perhaps because so many bee-keepers remove the honey from the comb before it has gone through the necessary curing process, and then again exposing it to the atmosphere to remove more of the water, and thus prevent the honey souring.

"It is well to remember that a merit in the article for sale is the chief factor. When the salesman finds that he has something that pleases the people, he becomes enthusiastic and convinces those seeking for a similar commodity to be influenced by his statement, which, if the goods carry out, he has little difficulty in making a second sale to the same party. Honey without the desired flavor has had more to do with its own undoing than any other one thing that it has to contend with. We have had many instances of this in our business by people buying a nice looking case of comb honey for their own use, and, finding it very different from what they had reason to expect, either returned the greater portion of it, or refrain from buying any more, sometimes for year. Let them get pure extracted honey a tasteless nature and they will not buy any more. It is an easy matter, as a rule, to sell to people what they want, and there are a great many people who desire honey that has this fine, old-fashioned flavor that they used to get, but which now they so seldom find offered in the market."

I have greatly feared that the honey trade would be hurt by the careless

offering of sour honey for sale. There's an unusual amount of un-ripened honey this year. Probably due to the peculiar season so much cool wet weather.

One batch of inferior honey will undo the work of years of building up a trade. Don't let it get on the market for the public will profit nothing by knowing of its existence, and the honey producer is sure to be the loser.

Bee-keeping's no dream, but full of realities and responsibilities that there's no dodging, might as well make up one's mind to meet them squarely. "The public demands neatness of appearance and it will have it, if it can not be secured one place it can another and the careless, slovenly producer will find himself minus a market, and that too, when others can scarcely meet the demand. The editor in commenting on the above article says, "it must have the right flavor—the bee-hive taste." I have sometimes thought the general tendency was to rush matters a little too much, that is to secure snow white sections at the sacrifice of well ripened honey, a condition necessary to fine flavor.

On page 473 Hasty gives credit to a Missourian in this way:

And this Missouri Yankee's method of reliquefying honey is to turn the barrel upside down! After having duly laughed at the plan we might as well get at the true inwardness of it. Yes, honey often candies, and then, after a while, reliquefies, or partly reliquefies itself (more frequently the latter). Turning the barrel over just as this natural process is beginning will help along nicely. Presuming that there is a space of half an inch or more under the upper head, all the mass peacemeal has to move that far—but such honey as they sell in paper bags is not going to get juicy by merely turning it t'other side

up. I should suppose that when the barrel of honey reaches a partly fluid state, rolling it a little semi-occasionally will hurry matters up. To get honey fluid enough to run out a bung-hole, and obviate the necessity of taking the head out, is worth something. A. G. Erickson, page 362.'

On the catching of drones by poultry he has this to say, "Mrs. Mary A. Ray, in the Sisters' department touches on one of the semi-important minor matters when she gives her experience with chickens taught to catch drones at the hive-entrances. She finds they soon learn to take heavy-laden workers, also. The theory is, that a chick or duck might indeed break over for once, but would get a sting in the throat sufficient to cure it of such wrong-doing in the future. Doubtful theory. Like other doubtful theories, I guess it needs looking after. Quite a good few living creatures succeed in swallowing worker-bees without getting stung much. Sad if poultry get into the same company. Page 360.

All my experience would point to having the bees wired in by poultry netting, saves lots of hard feeling if nothing else.

Of propolis salve he says, "Get a lot of propolis and heat it well, and mix it well with olive-oil. Let the oil have time to extract the virtues of the more solid ingredient; then heat it real hot and pour it off, leaving behind such of the propolis as shows too much inclination to go to the bottom. This is presumed to be a healing salve when it gets cool. (ANYTHING made into a salve, provided it is not positively injurious, will exclude air and keep out microbes, and thus favor healing). When I scrape propolis several cool days in succession (propolis reduced to dust gets thick on everything at such times), I find the

backs of my hands inclining to get sore. Too much healing power exercised on them, eh?" Page 461.

He refers to mixing varieties of honey, in this manner, "Holtermann, in the New York convention, went to the bottom of things more completely than essayists usually do. Good paper. Right that we should guard against mixing two different grades of honey in extracting. But I must nevertheless put in a word for those localities where the crop is small, and all extracted at the end of the season. Hardly practical to keep kinds separate then, the difficulty and fuss of doing so being too great. The loss of being unable to separate the kinds is more than made up by the increased ripeness of the whole. Sometimes bees work lively at bringing in a very poor article quite late and leave a lot of it unsealed. That can be extracted first, before the ripe honey is uncapped. Glad to see Holtermann in harmony with the best demands for ripeness. Listen once more to this flaming-sworded sentence of his: 'Too much of the crop leaves the hive when it is really not honey, but when it is still in its stages between nectar and honey.' Pages 470-472.

On page 263 of the Review E. D. Townsend says, "we make our bread and butter out of the bees. We have no other source of income."

Are not those the under-lying principles of most of our successful specialists? For that very reason they are successful. Providing of course, they have vim enough to care for the comforts of life. Not a few however seem to fall short of the latter requisite, judging by the manner of their sitting around with their hands in their lap apparently waiting for something to drop therein. Loafing around waiting for something to "turn up" or fall at

one's feet is most usually a loosing game. The side tracks of life are full of people pushed aside by progressive fellows, who are pushing to the front on the main line."

Mr. Townsend continues with this wholesome advice:

"We all ought to have a system of spending our income in the same as we do in producing our crop of honey. The question is do we do it? It is doubtful if many of us make it reach the whole year, to say nothing about a failure, making it necessary to lap over TWO years. This is a matter that must be decided by the individual himself. If you are ahead, say, having a little bank account, or having an income from some other source, to help tide over a failure, that is quite sure to come, perhaps it would be better to locate your out-yards as near home as you can conveniently; but the great majority better locate a yard or two some little distance from the home-yard. Try to get them where the pasturage is of a DIFFERENT NATURE than your home-yard, and, take my word for it, some of these years, when your crop at home is short, you will be harvesting a nice crop away from home, that will tide you over in nice shape, thus putting your business on a FIRM FOOTING, so that you can depend upon it for a living every year.

### Place For The Next Meeting of The National Bee-keepers' Association.

BY FRANK BENTON.

As a member of this organization I am of the opinion that stronger reasons can be presented in favor of holding the next annual convention in St. Louis than in any other place.

1st. There will not be the least doubt as to railway rates, and they will be lower than can be secured by the As-

sociation itself, even if the required number to secure reductions on the certificate plan from the various sections of the country could be got together in any other city.

2nd. Everyone wants to go to the grand World's Fair which will be held in St. Louis in 1904.

3rd. Many good bee-keepers who are able to give more information to others than they are likely to get themselves at such a meeting, would hardly feel disposed to pay their fare to a distant point for the sake of presenting in person their views, which they could give to the public through the medium of printed journals, unless there should be at the terminus of their journey some other attraction in addition to the convention.

4th. St. Louis is central. It will appeal to bee-keepers from the East and the West, from the North and the South. It is not too far East for the Rocky Mountain and Pacific Coast bee-keepers, nor too far West for those from the middle and Eastern regions.

5th. It has never had a national bee-keepers' meeting, although nearly all of the important cities about it have been thus favored, some of them even having three or more conventions apiece, Chicago, Indianapolis, Cincinnati, Lexington, Lincoln, and even St. Joseph ("which is in the state of Mizzouray"). New Orleans and also Atlanta have each had a bee-keepers' convention, which was, in each case, intended to be national or international in scope, and besides numbers of bee-keepers from the adjacent region, they did attract some also from the North.

6th. Accommodations of the right sort for holding a convention in St. Louis can easily be secured though proper application in time and a definite fixing of the date of the meeting long enough beforehand.

7th. Dozens of suggestions present





BRAZIL'S MAGNIFICENT BUILDING.

themselves to the mind of anyone at once as to the lines and opportunities which will be afforded to make a creditable showing for the industry, and of the scope of the work of the national society which represents it in this country. And these will be manifestly greater in connection with such an exhibition of apiarian products and implements as might be made at the St. Louis Exposition, than would be case were Cincinnati, San Antonio or Salt Lake City selected.

When the great Louisiana purchase Exposition has passed, I shall be heartily in favor holding a meeting in Texas, and one in Utah. In this connection it may be of interest to know where the thirty-four conventions have been held. Indianapolis has had 3; Cleveland, Louisville, Pittsburg and Toledo, 1 each; Philadelphia and New York, 2 each; Chicago, 4; Cincinnati,

2; Lexington, 1; Toronto, 2; Rochester, Detroit, Columbus, Brantford, Keokuk, Albany, Washington, St. Joseph and Lincoln, 1 each; Buffalo, 2; Omaha, Denver and Los Angeles, 1 each.

U. S. Department of Agriculture, Washington, D. C., January, 1904.  
—The American Bee-keeper.

### An Observation Hive.

BY D. D. ALLEY.

I AM a beginner in bee-keeping. I have two eight-“L” frame hives in my back garden and an observation hive in my dining room window. I keep them more for the pleasure afforded in studying their habits than for the amount of honey produced.

Yonkers is a city of over 50,000 inhabitants and is practically an over-

flow from the great city of New York, south of it. The lawns are kept mowed as close as the beard on a monk's face. White clover blossoms are as scarce as snowflakes are in Florida. In spite of the lack of pasturage, my bees managed to fill the sections with some of the finest honey I have ever eaten.

My observation hive has been a source of great pleasure and profitable study to myself and friends, one of whom has facetiously referred to it as "Alley's Bug House!" It was constructed to hold two frames "L" size. On the 1st of July, I placed in it one frame of bees with a queen and one frame with a starter only. In a short time this frame was filled with comb and brood. In the meantime brood from the old frame had hatched out and by the first of August the little hive was packed with bees. I wrote to the editor of a prominent bee journal, explaining the conditions and asking for advice to relieve the crowding, as I did not want to lose the bees. He suggested that I "remove a frame of brood and replace it with one empty comb," adding "We suppose, of course, that you are keeping this hive for pleasure and probably do not intend to winter them. "This advice would be all right if I had a large apiary; but, practically, it meant in my case to throw away the bees, and I did intend to try and winter them over.

I immediately set to work and constructed a new hive, the walls of which were in the form of two L's, the front and right side being stationary. The left side with the back can be shoved in and out on the bottom board, and it is held in place by two iron  $\frac{1}{4}$  inch rods passing through the upper edge of the sides. These rods also act as supports for the frames. This hive may be contracted to one frame or expanded to hold a dozen or more. I

have successfully prevented the propolizing of the movable side, by rubbing over the edges with sculptor's "plasterine," a substance used by sculptors for modeling, in place of clay. It never gets hard, it is water proof and seems to be a combination of beeswax and powdered sulphur. Perhaps the bees do not like the sulphur and so leave it alone. I transferred the bees to this new hive, expanding it and adding a new frame with starter from time to time. It now containing six frames and the bees have every prospect of wintering successfully. I inclose a photograph showing the hive in position.—The American Bee-keeper.

Yonkers, New York, Nov. 11, 1903.

### Vest's Gift to Education.

The death of Geo. G. Vest calls to mind again his last great gift to Missouri Education. In the fall of 1902, when failing health made it evident that he must retire from public life, he notified the authorities of Missouri University of his intention to make a magnificent contribution to the library of that institution. Under date of December 13, 1902, in his own hand, he wrote:

"I have a copy of every valuable publication since 1879, when I entered Senate, and have concluded to present these books to the Missouri State University. The collection embraces scientific, historical and miscellaneous publications of great value, many that cannot now be obtained as they are out of print. In this collection is a complete set of the Congressional Record from the meeting of the First Congress to the present time. There will be no expense of any kind to the University and all I ask is that these publications shall be arranged in the library so as to be kept together and that a placard be placed in that part



FLORAL WATER PARADE CROSSING GRAND BASIN.

of the library with printed words upon it:

"Government Documents Collected During Twenty-four Years of Public Service and Presented to the Missouri State University by G. G. Vest, United States Senator from Missouri."

The Board of Curators accepted the gift and set aside a special room for it where it might remain a lasting memorial to the "Little Giant" from Missouri.

### Practice School for Teachers.

The Missouri Teachers College, a department of the University of Missouri, will open a practice school this fall to which students will be admitted from two year high schools. Heretofore students could receive no instruction from the University unless they had previously completed a four years' high school course.

### Many Foreign Students Coming.

From present indications there will be an unusually large number of foreign students at Missouri University next year. Fifteen Egyptian students are now on the way to New York City where they will be met by Gobra Salen of Mahalla Kobra, Egypt, who attended the University last year. From New York they will come directly to Columbia and take up their residence in a house which young Salen is having prepared as nearly after Egyptian customs as American material makes possible. Among the number now enroute are Misac Yacoubian of Guizeh, Mahmood Bey Mazhar and Gallah Hahib Loutfallah of Cairo, Mikael Farag and Yahab Nicolas Hawara of Beyrouth, all members of the wealthiest and most aristocratic families of Egypt. Besides the Egyptian students

six Malay Filipinos, of the party of students now at the World's fair, will probably be placed in the Missouri institution as a part of the plan to distribute the entire number among leading American universities and thus train them to lead in Americanizing the Phillipine Islands. Seven or eight young men from South America and the West Indies are also coming, and inquiries received from Odessa, Russia indicate that there is a strong likelihood that a party of Russians will join the colony of foreign students at Missouri.

### These Things Inborn.

As long as men have eyes wherewith to gaze.

As long as men have eyes

The sight of beauty to their sense shall be

As mighty winds are to the sleeping sea

When storming billows rise.

And beauty's smile shall stir youths ardent  
blood

As rays of sunlight burst the swelling bud:

As long as men have eyes wherewith to gaze.

As long as men have hearts that long for homes

As long as men have hearts

Hid often like the a corn in the earth,

Their inborn love of noble woman's worth.

Beyond all beauty's art,

Shall stem the sensuous current of desire.

And urge the world's best thought to some-  
thing higher.

As long as men have hearts that long for

home,  
—Ella Wheeler Wilcox.

Mr. P. Noblecourt, writing to L'Apiculteur from a village in France, says in showing how slowly improved methods gain a footing in some localities, "At Aubencheul frame hives were not known [a short time ago]. During last winter I made four new ones which drew the attention of some friends who made some to transfer in, in May. The harvest was good in our country. Bee-keepers here have always been in the barbarous habit of suffocating their bees to get the honey and take the wax, hence they could not profit by good years to build up their apiaries.

In winter they saved but a few colonies in straw baskets or skeps. As for an apiary, none exists here except one at Villers, containing four Layens hives in a magnificent garden. I intend to make the new system known by giving and lending books and pamphlets treating on apiculture. Such is the progress (slow enough) that apiculture is making in our country." That writer is a born missionary.

L'Apiculteur for August, in its honey reports for Havre, Marseilles, Hamburg, and Belgium, reports sustained and increasing prices on foreign honey. Chilian honey seems to cut a wide swath in Europe. Concerning the matter of cutting prices the editor says, "The members of the Central Society on the 19th of June decided to ask 115 or at least 110 francs, and that price would have been sustained by the Parisian dealers. But just at that time a Gatinais house scattered circulars broadcast among grocers, offering superfine honey at 105. To offer honey at such a price, that house must have had some guarantee from some one against low prices. Whose fault was this, if not the producers', who sold without informing themselves as to what was going on around them? It seems to us the prices of 1903 should have been sustained, as the existing stock in the hands of wholesalers does not seem to be considerable." That's another case where those most interested pull trouble down on their own heads as well as on their neighbors, through lack of information.

A German journal announces the death of Michael Ambrozic, of Moistrana, Austria. He was one of the best-known bee-keepers in Europe, his advertisements for years occupying a large place in German bee-journals. He was a very progressive man, and will be greatly missed.

# The Progressive Bee-Keeper.

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

## FIFTY CENTS PER YEAR.

R. B. LEAHY, - Editor and Manager.  
S. E. MILLER, - Editorial Writer.  
LEAHY MFG. CO. - Publishers.

## ADVERTISING RATE CARD.

7 agate lines, 1/2-inch, one insertion.....	\$ 50
14 agate lines, 1 inch, one insertion.....	90
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~~☞~~ \*No fake medicine or mining scheme, or advertisements of a questionable character allowable.

## A Stray Straw.

S. E. MILLER.

Bloftton, Mo., Sept. 5, 1904.

From stray straws in Gleaning I take the following:

A FORGEIN JOURNAL—I don't recall which—gives as one way of improving stock the plan of leaving undisturbed all queen-cells in a colony which has swarmed, and then returning after-swarms as fast as they issue. If all cells but one are cut out, that one which is left may be the poorest in the lot; if all are left, and after-swarms returned, there will be a battle royal each time, and finally the best queen of the lot will remain victor.

I am somewhat surprised that Dr. Miller made no comment on this and as I consider it bad advice I will here give my opinion. I disagree with the writer that the best queen in the

lot will come out victorious. In fact I should think that just the reverse would be the fact, the best queen would be the one most fully developed as a queen while the poorest would be the one least developed as a queen and therefore partaking more of the nature of a worker and having a more fully developed sting and therefore the most likely to be the victor in a battle royal. The bee keeper who can not judge a good queen cell from a poor one by a careful examination with the eye does not know much about the inside of a bee hive. Therefore I consider the above straw bad advice.

## Good Queen Cells.

The above reminds me that it might not be out of place here to tell the novice how to select good queen cells. I am not an expert but as I am handling queen cells almost every day during the summer months my advice may be of some value to those of less experience along this particular line. I will say in the start that I mean to speak only of naturally built queen cells, viz.—Those built under the swarming impulse. Those built when the bees wish to superceed their queen and those built when the colony lose their queen by accident or when the apiarist purposely removes her.

When the apiarist removes a queen from a colony it is to all intents and purposes the same as if the queen had been lost by some accident or sudden death. I therefore class these with naturally, or perhaps more properly speaking, normally built queen cells.

We will suppose that a certain colony has cost a swarm and we wish to remove all superfluous cells to prevent after-swarms, in order to be sure that no queens have hatched we had better examine the colony on the sixth day after the swarm issues and,

if the swarm was delayed issuing by inclement weather or otherwise it might be best to examine it even earlier, for as a rule, under normal conditions one or more queens are likely to hatch on or about the seventh day.

We will suppose that the first queens are due to hatch in from twelve to twenty-four hours, we will remove the combs and examine them one by one, here is a hole in one comb and in it projecting downward we find a queen cell, we examine it closely and find that it is a large cell of good length and symmetrical form. In addition to this we will find that the cell is covered from its base almost to the point with a network of honey-comb in miniature, the cells of same decreasing in size from the base toward the point or lower extremity and the point having a somewhat bare or bald appearance, which latter, indicates that the queen will emerge within about twenty-four hours.

You may feel assured that such a cell will bring fourth a perfectly developed queen and need not hesitate about leaving it as the only one to remain in the hive. Handle the comb carefully and do not jar it or turn it up side down.

If the mother is a choice queen and we wish to save the cells we will remove carefully all that show the characteristics named above. We will now examine the net comb. Here we find a cell built right on the side of a smooth comb surface. It is somewhat short and has the bald appearance mentioned above almost to the base and the miniature comb is entirely lacking. This cell might produce a fair average queen but I should be very suspicious of it and in order to be on the safe side it would be best to condemn it. We will cut it open and remove the pupa or imago, as the case may be, and examine the inside of the

cell. Most likely we will find that the occupant has consumed all of the food within the cell, indicating that the cell was not supplied with that profusion of royal jelly, so essential to the production of a fully developed prolife, long lived queen.

I might add that we are not likely to find many such cells in a colony that has cost a prime swarm.

Now in order to make a comparison we will examine one of the cells that we pronounced first class, and this may be done as well after the queen has emerged from the cell as before. If we will look shortly after the queen has emerged we will sometimes find a substance somewhat resembling clabber milk but of a slightly more granular consistency. In a short time this will partially dry out and assume a dark amber color and a somewhat glutinous consistency resembling very much in appearance the gum thrown out on a wound of a peach. In fact we find it in this latter form oftener than otherwise immediately after the queen has emerged.

This indicated that workers have commenced to nourish the laua when it was quite small and that they continue to supply it with what appears to be a superfluous amount of food and finally sealed it up with a supply that it could not possibly consume. On the other hand the occupant of the smooth cell was probably not fed as a queen until too old to produce a perfectly developed queen and the workers in their hurry to produce a queen have neglected to supply it with that profusion of food and have sealed it up with no more than it could consume and quite possibly not as much as it would have consumed during its development.

### Another Straw.

BIENEN ZEITUNG says, "that, as the queen lays only worker eggs the

first year of her life, the finest combs are such as are made by first-year queens.

Like the other straw referred to Dr. Miller has made no comment upon it. Now if Beinen Zeitung is correct in asserting that a queen lays only worker eggs the first year of her life I am sure I did not know it, and I do not believe I know it yet. Probably I have not observed this particular point very closely but I feel pretty sure that the assertion is a mistake. How about it when an after-swarm costs a swarm later in the season? Is it not a fact that a swarm seldom if ever issues without leaving in the hive at least a few drones either mature or in the brood form and if so where do these drones come from if the eggs have not been laid by the young queen. Dr. Miller I wish you had passed your opinion on this straw and if you happen to see this I wish you would say something about it in some future bale of straw.

### The St. Louis Convention.

I have been just about half sick for the past ten days or more, but hope to come around all right in a few days and if I can make the necessary arrangement and nothing unforeseen prevents I hope to be in St. Louis at the time the Missouri State and the National bee keepers conventions meet, and hope to be able to attend at least one day and meet the many friends and readers of the Progressive as well as the many other worthy bee keepers who will attend. I should like to attend both conventions from beginning to end but with a wife and babies to show through at least a part of the great fair and limited time and pocket book I fear I shall have to be satisfied with a short visit among the bee keepers. Don't forget the date!

The Missouri State B. K. A. meets on Sept. 26 and the National on the 27th to 30th inclusive. Making a five days convention in all.

### Does Honey Absorb Moisture.

On page 210 August, Progressive, Mr. J. E. Johnson gives us a somewhat scientific and technical article on the above named subject. Let me tell of an experiment which is very simple and one that almost any one can try and one that will give the required answer so far as the bee keeper is concerned even if it is not scientific.

"Take two broad shallow pans and into each pour honey until it is one-eighth or one-fourth of an inch deep.

Place one of these in a cool damp cellar and the other in a garret or other dry warm room where the temperature remains at nearly 100 degrees Fahrenheit at all times."

In about two weeks compare the two samples, and I think that you will find that the one kept in the cellar has become so thin that it will flow almost like water, while the one kept in the warm room will have become slightly heavier in body but the change may be so slight as to be scarcely perceptible.

It is my opinion that honey will absorb moisture from a low damp atmosphere much faster than it will throw it off in a dry warm one, ventilation certainly has a great deal to do with it but I do not believe that any amount of ventilating with a cool damp atmosphere would improve the quality of honey.

### Boneset.

We seldom see this mentioned as a honey plant, but here I consider it one of the most reliable sources of the Autumn honey crop. I do not recollect of it ever failing entirely to yield

nectar, while Golden Rod fails oftener than it produces to any extent worth mentioning. A few minutes ago I was watching the bees working on the latter and found them scampering around over the blooms apparently in search of pollen only. I caught one and tried to make her disgorge but she evidently had scarcely a particle of nectar in her honey stomach.

### The Bee-Keeping World.

Copied from The American Bee-Keeper.

#### BRAZIL.

Under the initials J. V. B. a description of an ant, very hostile to the honey bee, is given in the *Bieneen-Vater*. The ant is small, hardly one centimeter in length, reddish in color, and very strong. She lives in hollow and decayed logs, and trees, under stones and other hiding places. Attacks on bees are made only during the night. The first colony, the writer says, he had was completely destroyed the first night. Colonies purchased afterward were placed on cement foundations and surrounded by water. But even this did not always prove effectual. Sometimes a palm leaf would drop from overhead touching a hive at some point and thus form a convenient bridge for the robber ants; or a blade of grass would find a lodging place in the water some way as to form a bridge etc., etc. The ants would always be very quick to take advantage of any such accident. The first ant which succeeds and reaches the hive entrance returns to its home and spreads the news and an army of ants at once starts out. A short battle is fought at the entrance. It requires two bees to kill one ant and they have to make the attack together, one from the rear, the other from the front, and even then one of the bees generally loses its life in the battle. If the ant colony is a populous one,

and they can fall upon a bee colony with an army from 6,000 to 20,000 strong the swarm is soon whipped out. At first the bees fight like tigers, but after a while they become discouraged and then only try to fill themselves with honey. The ants, however are not satisfied to take possession of the stores, their aim also is to kill or so mutilate all the bees as to make them useless for the future. They do this by cutting off their wings and then dragging them out of the hives. A strong ant colony often cleans out a hive in one night completely, bees, honey and brood. The writer of the article says that he has seen armies of ants several millions strong and that he has not found a practical method to destroy them.

#### RUSSIA.

A peculiar method of migratory bee-keeping is practiced in Russia on the larger rivers flowing south, according to the *Rhein. Btztg.* Large log rafts are constructed and covered with soil upon which some gardening is done. An apiary is located upon it and the attendants put up a tent for their shelter. I surmise the moving is done nights, rests are taken during daytime. The rafts are floated down the rivers during the season. The final stop is made at the end of the season in a section of the country whose timber is scarce. The rafts are taken apart and the timbers sold. Bees and honey are disposed of and the attendants make their way homeward by rail or steamboat.

#### ENGLAND AND IRELAND.

The *British Bee Journal* reports heavy winter losses throughout the Empire. Never before have bee-keepers had so many weak colonies in the spring.

#### GERMANY.

A good honey crop is reported from many places in Germany. The winter has been mild and the spring early.



For years I have had a feeling that the writings of the American-Bee-Masters did not receive consideration of the German bee-keepers as they should. The editor of *Gleanings* has of late expressed a similar opinion in his journal which induces Pfr. Buchholz to make the following reply in *Deutsche Bienenzucht*; It is an undisputable fact that we in Germany may learn a good deal from the American bee-keepers; but when all one's knowledge of a foreign people is based upon translations, misconceptions often result. The masses, of course, are depending upon the translations for their information. As a matter of fact, he—Buchholz—practices American methods in rearing queens and rears fine queens.

To improve the bee-pasturage the bee-keepers of a certain district have put the following plan in operation: Each bee-keeper pays five cents for every colony owned into a common fund. The money is used in purchasing phacelia-seed which is distributed gratis to such bee-keepers and farmers who will agree to sow the seed upon their land in reach of the bees. A part of the money raised has been used for planting out willow trees.

#### AUSTRIA.

It may be noticed that a great deal more artistic taste is exhibited in the construction of bee hives in England, Germany, etc., than is customary in America. In Carniola, a province of Austria, it is an old time custom to decorate hives very fancifully. Scenes from Biblical history are very commonly represented in fancy colors upon the fronts of hives, also historical facts as relating to the history of the country. The common customs of the people receive attention also, and the humorous side is frequently brought out in a striking manner. Some of the older pieces are real pieces of art well worth preserving. Professor Benton was showing such a one at a bee-

keepers' meeting a year or two ago. The Americans always have and do yet push the practical side of the business only. Their hives are made simple and most convenient to handle.

#### SWITZERLAND.

The "Societe des Apiculteurs Suis-ses" has just published its annual report covering the work done during last year at its different stations. The report is well printed, with maps, engravings, half-tones, etc. Among the advices and other items given, the editor of the *Rucher Belge* has translated the following:

Avoid air currents striking the entrance of the hives. The nearest bees, the ones on the outside of the clusters, are sometimes chilled and being unable to move to a warmer place, fall to the bottom of the hive and die. According to some of the reports the loss may be much greater than usually supposed. Some protection should be provided. (In Europe the bees are wintered out of doors.)

2. Avoid disturbing them. A knock on the hive will bring out a dozen or more bees which get chilled and are unable to return. Even if they do not actually come out of the hive they leave the cluster, and are chilled before regaining their place.

3. The minimum consumption of honey for the months of November, December and January was five and one-half pounds. For February and March seven and one-half pounds. For the five months 13 pounds. The larger quantity during the last two months is due to brood rearing. One colony went through with only a little less than eight pounds while another consumed nearly 22 pounds.

4. It is best not to visit the hives when the bees make their first flying out. They are apt to ball the queen.

5. Early in the spring the bees consume whatever is left of their winter stores and raise considerable amount

of brood. These stores are soon used up, and when they are, the bees depend upon what they gather to raise brood. As the bad weather often interferes with the gathering, the amount of brood is necessarily curtailed in proportion (unless the apiarist feeds,) and when the flow comes, there is not the population to gather it, that otherwise would have been.

6. Honey is better than sugar for spring feeding. Probably because it contains some pollen. The provision of pollen, like that of honey may be too short.

7. Have none but strong colonies. A good way to strengthen a weak colony is to add a swarm to it, keeping the queen of the swarm rather than that of the colony. Very often the weakness of a colony is due to the unproductiveness of the queen.

8. "Many swarms, little surplus." A proof of this was seen at the Altsaetten station. Two colonies of equal force had worked equally well up to the time of swarming. The colony A swarmed: colony B didn't. Here is what surplus they produced during the three months:

	May	June	July	Total
Colony A.....	17	1 1-3	3	21 1-3
Colony B.....	55	2-3	3 1-2	4 1-2 63 2-3

The swarming of A occurred in the middle of the main surplus flow which that year was of rather short duration.

9. The report has a chart in colors showing the amount of nectar brought daily by several colonies on scales, and also the amounts consumed, taken out.

The best colony of the 29 stations gave a surplus of 122 pounds. During only 21 days, the daily amount brought in amounted to four pounds or over. The remainder of the season it was much lower.

Another colony on scales gave only 33 pounds of surplus. During only

10 days the daily amount brought in, as shown by the scale, reached between two and three pounds. All this shows how few are the days during which the bees can gather large amounts of nectar, and how necessary it is to have the strongest possible colonies when such days happen.

10. The atmospheric electricity has an influence on the production of the nectar. During the stormy or threatening days, the positive electricity of the atmosphere is constantly passing in the ground and accelerates the movement of the sap, the growth of the plants and the other features of vegetation. If, now, the ground is rich and sufficiently wet, the production of nectar will be increased. If the opposite conditions prevail, the flow of nectar will be diminished. Sometimes in dry weather, a stormy condition of the atmosphere can cut off the flow entirely. That this double action exists has been shown by submitting plants cultivated in pots to an electric current.

11. To cure foul brood, it is recommended to take away the combs, shut the bees in a box without food during two days and return them after having disinfected the hive thoroughly. If the apiary has been badly diseased the advice is given to move it elsewhere. Weak colonies should be united.

12. In most localities (in Switzerland) the main honey flow is during the last half of May.

In one of the bulletins of the Suisse Romande Society is an interesting work on honey, by Prof. F. Seiler. The only part really new is on the production of the different kinds of honey dew. Here is what he says:

"The bees also gather honey dew chiefly at the base of the leaf stems. The honey from that source is of a greenish brown color, very thick, and of a peculiar strong taste. It is not

obtained every year. It is found on fruit trees only when the crop of fruit will be absent or very short. The honey dew is formed by the materials which ought to have filled the fruits. When there is no fruit to fill, these materials exude chiefly at the base of leaf stems. They contain a small proportion of sugar, but are chiefly formed of dextrine. The dextrine is a gum very similar, chemically speaking, to the different fruit sugars. The bees gather it and transform it into honey in the same manner in which they transform the nectar of the blossoms. However, the transformation is not complete. A portion of it remains unchanged, and it is that portion which gives the honey dew its particular consistency."—Le Rucher Belge.

#### FRANCE.

A discussion on the use of colonies on scales, and the meaning of the figures in regard to the evaporation of nectar, consumption of the bees for living, producing wax, raising brood, etc., is going on in the Apiculteur between Messrs. Sylviac and Boris Spoerér. The whole thing does not seem very clear except one point. Up to this day it has been admitted that the amount of nectar gathered by the bees amounts to the difference in weight of the hive between early in the morning and late at night. But it is more than that. The honey or nectar evaporates during the day as well as during the night; the bees eat, secrete wax and feed the brood as well during the day as during the night. So the difference in weight between morning and night does not show the whole amount brought in, but only that amount less what is consumed or evaporated. Now suppose a hive weighs 40 pounds in the morning and 50 pounds in the evening and 45 the next morning. Five pounds will have been consumed and evaporated during the

night. Certainly something like five pounds must also have been used up during the day. So the bees must have brought in not only the 10 pounds shown by the scale (the difference between 50 and 40) but also five pounds consumed during the day, that is 15 pounds in all.—L'Apiculteur.

To prepare barrels for honey Mr. Bourgeois gives the following: Use barrels with iron hoops. Thoroughly dry them in the sun before using. Drive the hoops as tight as possible and put in a few nails to keep them from slipping. Coat the inside with glue or gelatine.—L'Apiculteur.

### How The Doctor Saved His Life.

Have you any good doctors in this town?

Oh yes, the best in the world!

How is doctor Jones across the street?

The best in the state, he saved my life once.

How was that?

I was sick and sent for Dr. Brown.

Got no better, sent for Dr. Adams.

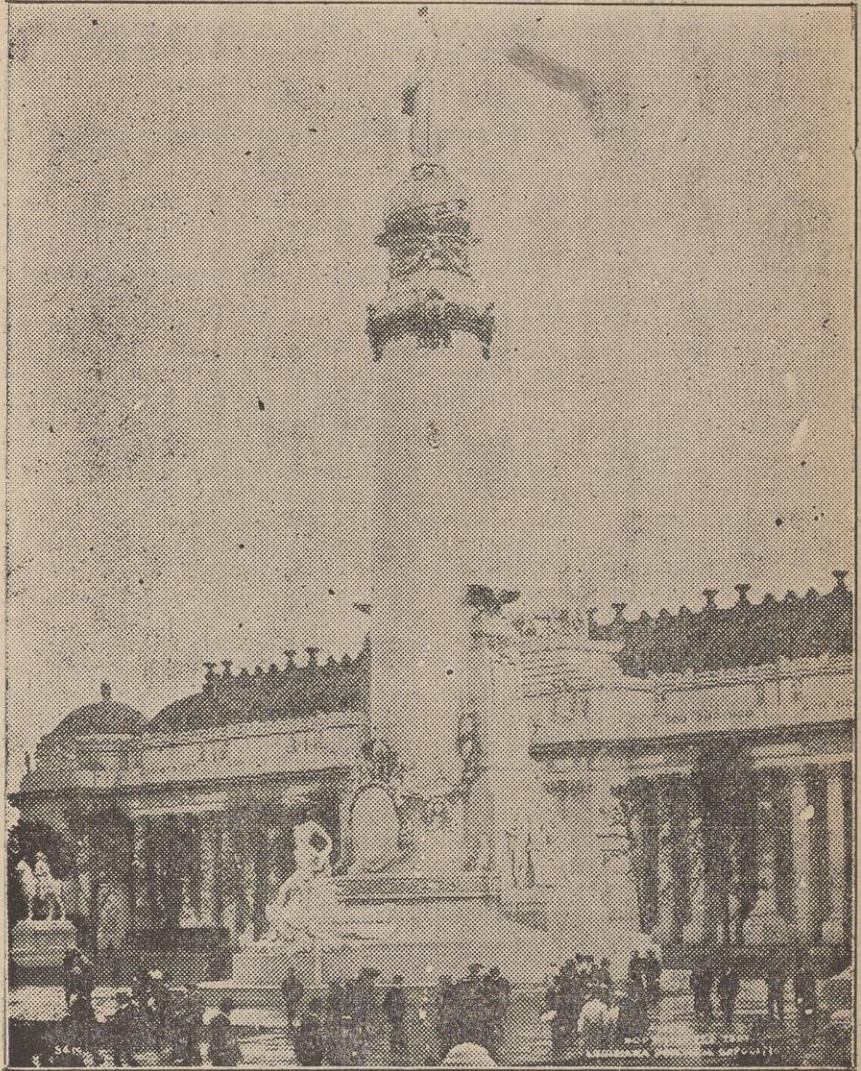
Got worse, sent for Dr. Smith.

Thought I was going to die.

Sent for Dr. Jones. He was too busy to come. I got well. He saved my life.—Herald and Weekly Star. Modified version.

According to a writer in Rev. Eclectic the marked increase in the honey flow at times during thunderstorms is owing to the electricity permeating the soil and accelerating the outward movement of the fluids in some plants. However that may be, it is certain that lightning often does promote the secretion of nectar.

**Better subscribe for the Progressive Bee-Keeper. It will be worth 50c a year to you.**



THE LOUISIANA PURCHASE MONUMENT.

### Missouri Lads Are Debaters.

An investigation just completed by the Student's Debating League of the University of Missouri shows that the young men of that institution have won fourteen of the twenty intercollegiate debates in which they have en-

gaged. In the list of victories are: Kansas University, four; Nebraska University, four; Illinois University, three; Wisconsin University, one; Arkansas University, one; Kansas City Law School, one. The debates lost are: Kansas University, three; Nebraska University, two; Texas University, one; Kansas City Law School, one.

# The Beekeepers' Review

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## Can Help You Make Money

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Opportunities for making money out of bee-keeping were never greater. If the bee-keeper with a single apiary, from which he makes a living in a good year, and nothing in a poor year, would only arouse himself to the

### CHANGED CONDITIONS,

secure a good location, if not already in possession of one, adopt such methods as will enable him to branch out and manage several apiaries, he will find that in a good year he can

### PILE UP HONEY

ton upon ton—enough to support himself and family for several years. The Review is helping bee-keepers to accomplish this very thing.

### THE FIRST STEP

in making money as a bee-keeper is the securing of a good location; and Review even goes so far as to discover and make known desirable, unoccupied locations

### GET GOOD STOCK,

Having secured the location, the next step is that of stocking it with bees of the most desirable strain; and, having had years of experience with all of the leading varieties of bees, the editor of the Review is able to, and does, tell his readers where to get the best stock. Still further, the Review tells how to make

### RAPID INCREASE.

how to build up ten or a dozen colonies, in a single season, into an apiary of 100 or more colonies.

Having the location and the bees, the bee-keeper must learn how to manage them so as to be able to establish an out-apiary here, and another there, and care for them with weekly visits—yes, by monthly, or even longer, visits, when extracted honey is produced. It is in teaching bee-keepers how to thus

### CONTROL SWARMING,

that the Review has been, and is still, doing its best work. If a man only knows how, he can care for several apiaries now as easily as he once cared for only one.

Having secured a crop of honey, the next step is that of selling it. This is the most neglected, yet

### THE MOST IMPORTANT PROBLEM

of successful, money-making bee-keeping and one that the Review is working the hardest to solve. So many men work hard all summer, produce a good crop, and then almost give it away. The Review is trying to put a stop to this "giving it away." It is showing, by the actual experience of enterprising bee-keepers, how the leisure months may be employed in selling honey at prices that some of us would call exorbitant. The men who have done this TELL HOW THEY DID IT.

The editor of the Review has a wide, actual, personal acquaintance with all of the

### LEADING BEE-KEEPERS

from Maine to California, and is thus able to secure, as correspondents, men who have scattered out-apiaries widely, managed them with little or no help, and made money. These men are able to write from actual experience—they know how they have succeeded, and can tell others.

One thing is certain, if you are a bee-keeping specialist, or expect to become one, if bee-keeping is your BUSINESS, you can't afford not to

### READ THE REVIEW.

It will lead you and encourage you, and fill you with ideas, and tell you how to do things—show you how to enlarge your business and make money.

The Review is published monthly at \$1.00 a year; but, if you wish to become better acquainted with it before subscribing,

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Nebraska Farmer	-	1 00	-	1 10
Home and Farm	-	50	-	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.

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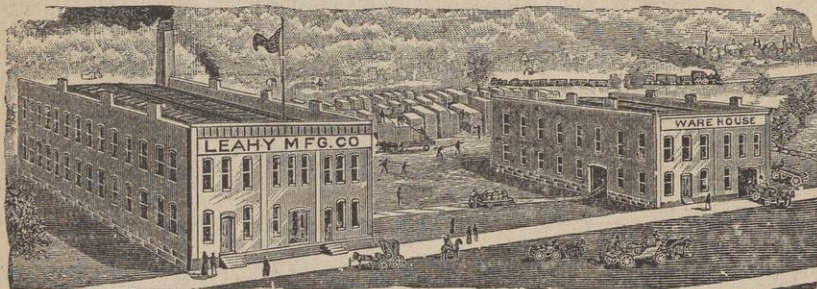
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Fulton Gazette: "I am the only breeder of corn in the county, I guess," said J. O. Erwin, a young farmer of near Steedman, in the river bottom section of the Kingdom. "I raised 4 varieties of pedigree corn, Reid's Yellow Dent, Pride of Saline, both yellow kinds, Boone County White and St. Charles White. These varieties have been bred up, and there is just as much importance in keeping them pure and raising good corn as there is in raising pure-bred stock. May seem queer talk to some folks but there is truth in it, all the same."

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Mr. Mitchell will send either of his other books, "Elk Hill," "Sonnets," "Jael," etc., at the same price if you desire. Any five old ones for \$1.00.

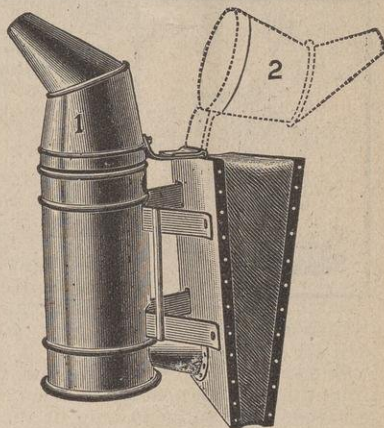
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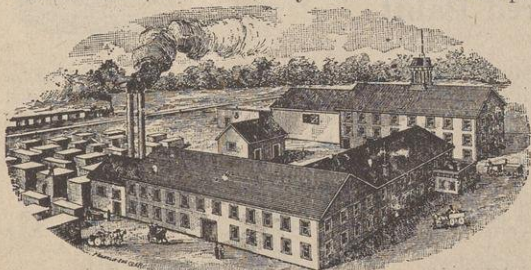
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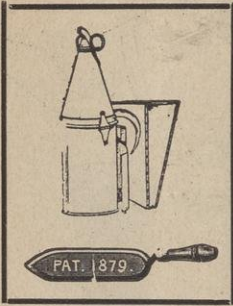
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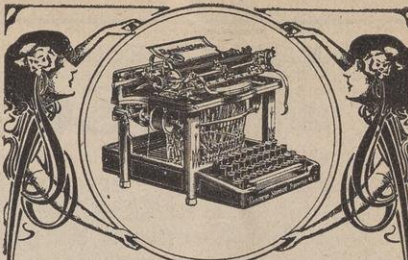
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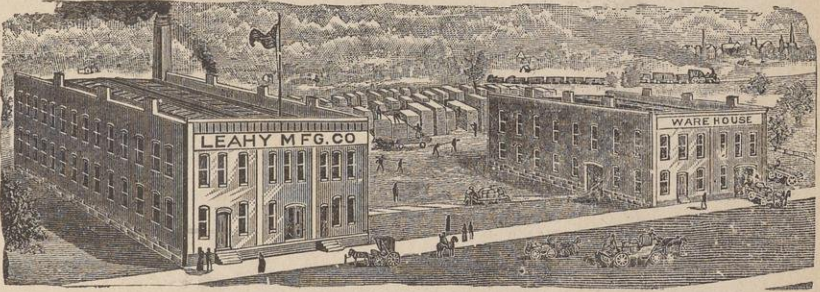
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