

The progressive bee-keeper. Vol. XIII [XV], No. 11 Nov. 1905

Higginsville, Mo.: Leahy Manufacturing Co., Nov. 1905

https://digital.library.wisc.edu/1711.dl/FYWRLSPER2OAZ8K

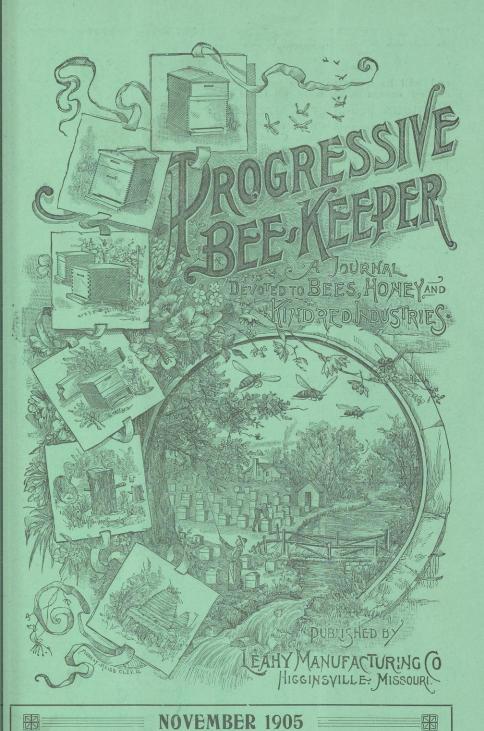
http://rightsstatements.org/vocab/NKC/1.0/

For information on re-use see:

http://digital.library.wisc.edu/1711.dl/Copyright

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.



I Am Still in the Ring

and will be ready to serve you the coming season with more of those

Famous Missouri Oueens

at the same reasonable rates as in the Also Nucleus and Colonies.

	April	May	to Oct.
Untested Queens (Ital.)	100		
Each		\$.90	\$.60
Three for		2.50	1 60
Tested Queens, each		1.25	1.00
Three Frame Nucleus with			
Tested Queen	4.00	3 75	3.25
Untested Queen		2.75	2,50
Full Colonies in 10-frame			
bive, tested queens	7.00	6.00	5.00
One and Two-Frame Nucl	eus a	t prop	ortion-

S. E. MILLER, BLUFFTON, MO.

Bluffton is P. O. Money Order office.

Make Your Own Hives.

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

ate prices.

W. F. & John Barns Co. 614 Ruby St. Rockford, Ills.



Clubbing List

We will send the Progressive Bee-Keeper with

The Review (\$	31 (00)	- 9	51	30
Colman's Rural World	1 0	00 .	-	1	15
Journal of Agriculture	1 (00		1	15
Kansas Farmer	1 0	00	-	1	10
Nebraska Farmer -	1 0	00		1	10
Home and Farm	5	50	-		70

L.E. Archias Seed Co.

OF CARTHAGE, MISSOURI.

One of the Largest Seed Stores in the West.

Handle

"Higginsville"
Bee Supplies
Exclusively.

Catalogue Free!

STERLING STEEL ROTARY WASHING MACHINE

THIS machine is made of heavy steel, galvanized, sides and bottom corrugated to form perfect rubbing surfaces. THE WRINGER BOX is made a part of the machine, thus adding strength to the machine, and the wringer does not have to be removed while washing. THE LEGS are hardwood. THE LID is made of Cypress The movement is very simple and effective. It consists of a rack bar working back and forth on a half circle, engaging a pinion that the agitator shaft runs through. There is no lost motion or knocking when the agitator reverses. By our



simple gear device we get more leverage than by any other movement, thus saving about twenty-five per cent. of power. The castings are so placed that they aid in lifting the lid. The machines complete weigh sixty pounds, and are shipped with the legs off, insuring a low rate of freigh

Points of Superiority

THE STERLING STEEL ROTARY, being made of galvanized steel, makes it practically indestructable. It will not dry out and leak. It is easier to clean and does not become foul smelling because it will not absorb the dirt and soapy water, which makes it perfectly sanitary. It is easier to handle because it weighs less than a wood tub machine. It runs easier because we get more leverage, washes equicker because there is no lost motion and the corrugated sides and bottom form

better rubbing surfaces than wood. The freight is less because it weighs less and is shipped K D. The Sterling Steel Rotary is something new but has been thoroughly tested under all conditions. It looks attractive and catches the eye.

The Eureka Co.,

ROCK FALLS,

ILLINOIS.



.. Contents ..

	Contents
Sundi	ries
Meeti	ing of the Missouri State Bee-Keepers
Edito	rial
	rees
Mark	eting Honey
	Queen Bees
Stand	lard Honey
Progr	ramme for the National Convention



The Progressive Bee-Keeper

A Journal Devoted to Bees, Honey and Kindred Supplies

VOL. XIII.

HIGGINSVILLE, MO, NOV. 1905.

NO. 11

SUNDRIES.

SOMNAMBULIST.

Ye older time people, and the uninitated of today, term the taking of surplus, robbing, which term is most apprepriately used word when wholesale pillaging, such as I referred to in my la-t, is practiced. But robbing, as used by bee-keepers, usually refers to the thieving of honey by the bees, one colony from another. This proceeding is justly regarded with apprehension on the part of the bee-keeper, as once well under headway it amounts to something serious, sometimes requiring days to get the excitement quieted down and all things working regularly.

Various devices are in demand at such times by the aid of which to conquer the situation. The supply houses send out light tents, their lightness being intended for convenience, but in many instances they prove entirely too light for continued service. Of course one handy with tools can frequently improve on some points in connection with these tents: and one of my men has made him a screen wire arrangements which is the pride of his heart. Who can wonder if one does feel particulary proud if after having battled with a severe case of robbing, he can invent some plan by which he is master of the situation? By all odds the best plan is so to manage, if possible, that the robbing is never started.

Gleanings in Bee Culture (September 15th) gives a method practied

with success in their yards, which I hand over to those readers of the Progressive who are unfortunate enough to be without this most excellent instructer:

We use 60-lb. cans with small holes punched in the top as before. These are now filled with syrup of the consistency of two parts of water to one of sugar. The weaker syrup has less of a tendency to make the bees scramble against each other. Then, to mitigate futher the damage to the bees by reason of their struggling against each other, the 60 lb, cans are elevated some ten feet above the ground. The wire bail or handle that is in the top is unsoldered. The can is then turned upside, down, and the handle is soldered to the bottom. The other end of the car is perforated with small holes, as before explained. A rope is passed over a limb of a tree, 12 feet or more above the ground. When the can is filled with the two to-one syrup, the rope is tied to the bail (now on the bottom of the can), when the can is hauled up to the height of about 10 feet. It may take several hours for the bees to find it, but when they do they will begin in earnest. The bees will form in bunches at the perforations, and drop down: but instead of dropping with a thud, or a jar to the ground or in the grass, sustaining more or less of a shock, and wearing out their wings in the scramble to take wings in the grass, they catch wing before they actually strike the ground and fly up again. They no more than get a little sip of syrup

than down they go again, and so on. The under side of the tin is so smooth that there is nothing for the bees to cling to, and they can not do very much scrambling. But just the minute two or three get to sugging at the same hole, down they go. The result is, we have produced almost all the conditions of an artificial honey flow-It takes the bees so long to get a load of syrup that they fly back and forth to the hives quietly, and without excitement. Two 60-lb. cans of dilute syrup will keep a yard of some 300 colonies during an absolute dearth of honey quiet for a couple of days so that the hives can be opened indiscriminately, and combs exposed without any robbing. It begins to develop now that the bees that do most of the robbing represent but a very small portion of the whole yard. It is these that we keep busy by outdoor feeding. As they can not do any scrambling to any extent there is not the same wear and tear that we experienced in our early experiments. We fed up for winter all of our 300 colonies at the home yard by this outdoor feeding. What is more, this syrup is ripened in nature's way, and therefore must make an ideal winter food.

Some of the mild Indian summer days, for which our climate is so widely celebrated, might be pleasently utilized by hunting wild bees. On a bright, sunny day when bees are able to be out on a scouting expedition prepare a bee box by placing therein a small bit of honey and place in an exposed place and see how long its "sweet attractions" will be neglected. At first it will be but one or two "nosey" bodies, but after they have well filled themselves by some peculiar kird of telepathy, much more effective than many of our phones, the glad tidings

are spread abroad, and this same instinct of robbing establishes a line of march between the tempting bait and the forrest nome.

One of the most delightful outings I ever experienced was of this nature, and when the dinner hour arrived we were invited to a dinner of boilod beans and pork, with corn bread, in the woods, all unannouced and with many of the usual proprieties dropped, and I can assure no feast was ever however elaborate attacked with more relish, what is better than good hot Missouri corn bread crowned with jersy butter and over all delicious melting honey.

If the precaution is taken to leave sufficient stores for the preservation of the wild colony there may be a second such trip assured. If however, the tree must be felled the opportunity of a second visit is lost.

A bee tree should never be out without the permission of the owner thereof, unless desirous of breeding trouble.
In the securing of the honey lies many
a chance for the exercise of ingenuity,
and after a long tramp beneath sunny
skies and surrounded by balmy air and
Nature's own, who but than is exhilerated. Who can help enjoying being
a tramps for a day? Wonder if the
specialist along that line have similarfeelings.

Truly it would seem that their amiless purposeless lives would prove such a curse that enjoying Nature would be out of their power, not to mention the monotony of their existance.

Speaking of the log cabin in the wood reminds me of a conversation held in reference to friends who have strained themselves financially to build them a home of modern type.

They will most probably never see the day that they will be free from debt and it was remarked that these people would have been far happier.

Debt seems to stimulate some to economy and industry. A man may need a barn, and go in debt for it and possibly the saving of crops through the possession of the barn, may more than pay out the debt so that he can feel able to risk a debt for an improved home. The young, careful, strong and ambitious man can afford to pay interest in order to make a profit, but debts should be labled "handled with care."

Perhaps you are wondering what this has to do with bees? Much. Bee keepers must have homes, and moreover they are oftimes led into snares by the offering of that which seems to be bargains, in bee yards and accompanying perquisets, in the beginning of a season, when everything is clothed in roseate hues, only to find themselves misled by one or more unlooked for conditions, when it is too late to remedy matters, they are ready to clothe themselves in the habilliments of mourning. Take the present season, so promising in its beginning, and so disappointing in its final results, the bee-keeper who was tempted to run in debt has naught with which to liquidate While he who was more cautious feels secure in his little all. Still, the only one who never makes any mistakes, is he who never does anything. And even if mistakes are made a man feels a certain kind of relief when he knows he has done his best.

"What we call luck, is simply pluck And doing things over and over;

Courage and will, perseverance and skill Are the four leaves of luck's clover,"

Several writers have recently been airing their success in moving bees without closing the entrances. W. L. Porter, in Gleanings, says: "1'o do this successfully one must understand the habits of bees." The same can be said of most of the manipultations con-

nected with handling the business. He loads when bees are all in the hives, early in the morning, late in the evening, or on cool cloudy days when bees are not flying. He smokes the bees before placing them on the wagon, and an occasional whiff is given to keep them quiet until all are loaded. Then they are covered with a wagon sheet and as long as the wagon is kept in motion the bees remain quiet.

E. F. Atwater subdues by smoke and drumming, advises the use of a spring wagon, and one of these men closed by saying, "If any one uses this method and looses a valuable team or meets with a bad accident, don't blame me; I am not recommending this method," and so forth, and sleepy Sommy concludes; his best plan is to keep in the old ruts, and meet with success by not attempting the new way.

The matter of closing entrance is not such a job after all, and who would not much prefer going a little slow, as to run the risk of accident, which may involve loss of life, and which accident, though it does not prove serious, tends to make against the pursuit, in as much as it arouses the fears of a public already prejudiced. Surely keeping down trouble is easier than to stop it when ence it has begun to brew.

Adrian Getaz in American Bee Journal sums up a review of several different methods of bee-keeping on a large scale in the following comments:

"When I began this paper I intended to give a description of at least half a dozen leading apiarists instead of three I soon discovered that it would lengthen the contribution too much and contain too many repetitions. The following few points should be mentioned:

1. A honey-house should be put up at every apiary right in the midst of the bees, and built so that it can be easily removed, for an apiary placed on somebody else's land may have to be removed at any time.

- 2. Some have an extracting outfit complete at every apiary. It costs more, but saves the hauling. It has the advantage that should an unusual flow happen, the extracting might be done simultaneously at every point needed.
- 3. The majority insist on having enough combs to pile up on the hives until the honey is ripe, or the apiarist ready. Two or three say that in dry climates (California or Colorado) the honey will ripen just as well in the tanks as in the hives, and they prefer to extract often.
- 4. All but two want the different yards two or three miles a part, and as accessible as possible to the home apiary. The other two want them at quite a distance in order to have the chance of catching a crop at some one or other place.
- 5. The number of colonies at each yard, without overstocking, is estimated at about 100 in the East, to 200 or 300 in California. One exception is Mr. Alexander, of New York State, who claims that almost any locality could support 500 colonies as well as 50 or even less.
- 6. The summary of all is what the Dadants told us long ago: Plenty of empty combs both for brood and honey. With that condition the number of swarms will be insignificant.
- 7. Very few extensive bee keepers work for comb honey. The swarming can not entirely be avoided, and recourse must be had either to removing queens or "shook" swarming, as it is now called. In a small apiary it is best to treat the colonies that do swarm and not bother the others; but with hundreds of thousands of colonies such discrimination is impossible.

All of which tends to strengthen our belief that bee keeping is as yet in its infancy and has before it a wonderful

future.

BEE INDUSTRY IN MISSOURI.

We give the following statistics taken from the book on Missouri and we understand that these were collect in 1903 by the Secretary of the State Board of Agriculture and have no doubt that they are as near correct as it is practical to get them, although there is no doubt that the figures are too low, as it is almost impossible to get a complete list of every bee keeper in the state.

The whole number of swarms of bees as given are 180,806, valued at \$530,195, which is about \$3 each, a very low estimate. The honey produced that year was 6,920,296 pounds, valued at \$899,301.00, which is 8 cents per pound. Perhaps none sell for less and we know quite a great deal brings more per pound than 8 cents, so on an investment as given of \$530,-195, a profit of \$899,301 was obtained. or nearly 200 per cent, and if the bees had not gathered this honey it would have been a complete loss, and this honey gathered does not cost one cent to other crops, but the fact is, nature has so provided that the bees in gathering the nectar from the flowers benefit them in propagating their seed.

There is no legitimate occupation that pays so well as bee keeping, as these statistics were gathered by addressing men mostly all farmers throughout the state, and the profits as given would be of necessity very low, as but few farmers get the results from their bees as does one that gives the bees special attention, of which there are many of these kind in the state. While it may be true these figures were obtained in a good season for the bees, yet we are sure that the bees are as successful in gathering a crop of honey as are any other crops obtained from year to year. There were no figures given on bees-wax, which would add quite a good deal more to the profit as there are many thousands of pounds obtained every year from the bees.

The foregoing only tells the smallest part of the profits from the bees, as we have stated before in former articles the bees help in millions of dollars' worth in securing fruit crops. We have the statement of Mr. N. F. Murray who has been president of the Missouri state Horticulture society and a man as well posted on the fruit interests as any one in the state who stated to us and also made the statement many times in farmers institutes some years ago (we do not now remember the year) that the fruit crop that year amounted to \$20,000,000. There have been many thousands of fruit trees set out since that, many thousands of which are large enough to bear fruit, and it is conceeded by horticulturists that fruit trees depend largely on cross fertilization by the bees during fruit blooms.

Now in consideration of the foregoing it seems to us that bees and beekeeping should have and are most surly entitled to some consideration when bee keepers desire a law on foul brood, a most infectious disease and one that connot be stamped out when started only by a law that will give an inspector authority and power to stamp the disease out or cure whereever found. Our Governor saw fit in the last session of our legislature to veto the bill passed by both houses for a law to have an inspector, giving his reason, we have understood, "that it would be class legislation, and that the bee keeper should doctor his own bees." We have understood that he had an idea that an inspector could go into any one's bee yard under the intended law and at his own option

destroy the bees if he saw fit. We do not know how he got this idea if he did from the reading of the intended law. If we are rightly informed in the matter of Glanders among horses, or in fact any malignant infectious disease among stock when discovered. the state veterinarian has the right to condemn the stricken stock, to quarantine or even have the stock destroyed if necessary. As to quarantine, bees are out of the question. Bee keepers oaly want a law to have a similar effect as with any other stock with an incurable disease. One having bees with infectious disease refusing to cure, or have them cared or destroyed can by so refusing, keep all other bees that may come in contact with his apiary from being cured or the disease prevented. As is well known bees from any other are likely, and most generally do visit other hives in their vicinity in quest of any store that may be obtainable where a hive having a disease soon becomes so depopulated that it is a very easy matter for bees from another hive to get in and soon rob them and where foul brood exists it is carried to any other hives that this honey may come to.

The Missouri Bee Keepers Association needs the coorporation and help from all the bee keepers; throughout the state as , we expect to try for a foul brood law again when our next legislature meets.

J. W. ROUSE, Mexico, Mo. President Mo. State Bee Keepers' association.

SALESMEN WANTED to look after our interest in Lafayette and adjacent counties. Salary or commission. Address Clover Oil and Paint Co, Cleveland, Ot. 251*

The Progressive Bee-Keeper.

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

50 CENTS PER YEAR.

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

ADVERTISING RATE CARD.

7 agate lines, %-inch one insertion\$	50
98 agate lines. 1 page, one insertion10	50

TIME ADVERTISMENT DISCOUNTS.

mi	1ntione		per cent
Th	ree insertions		non cont
034	incontions	107	bet cent
DIX	Insertions	15	ner cent
Nin	e insertions	15	per com
	1 1-nontions	20	per cent
W	elveinsertions	**** ******* *******	

No fake medicine or mining scheme, or advertisements of a questionable character allowable.

WHAT IT COSTS TO REACH THE CONSUMER.

S. E MILLER.

The above is a problem that I have given considerable thought and have often wondered if there could not be devised a method whereby the heavy expense of getting a commodity from producer to consumer would be considerably reduced. A short time ago I visited a man in St. Louis who has been selling honey for me, and the above matter was forcibly recalled to mind. I put the most of my extracted honey up in two and a half and five and ten pound canes and pails. They hold that amount net, or not including the weight of the can. At wholesale I sell them at 25c, 50c and \$1.00 respectively. which is ten cents per lb. less the cost of cans and boxes for packing. After deducting cost of pails, freight from factory and cost of boxing, it leaves me about 92 cents net for a ton lb. pail. or practically 9 cents per 1b. With the smaller sized cans the cost per 1b. for canning comes some higher, so that taking it all round the honey does not net 9 cents per lb. We will now go to the other end of the transaction. The man in St. Louis told me he was selling the 21 lb cans at 40 cents, the 5 lb pails at 75 cents and the 10 lb pails at \$1.50. This makes the cost to the consumer 16 cents per 1b in two and a half lb. cans and 15 cents in the five and ten lb pails. In other words, the consumer pays 60 per cent more than I receive for the honey, and this too when it has passed through the hands of only one dealer. How much greater then must be the difference when our product passes through the hands of several dealers or middle men, and as there is a limit to the price that the consumer will pay, the greater part of this difference is taken off the producer. hence the low price of honey.

The question then arises, what are you going to do about it? The merchant must be offered some inducement in the way of a profit or he will not handle the goods. Transportation charges are a thing that we cannot avoid. This leaves only one way to avoid at least a part of this expense and that is to sell as near home as possible and as near direct to the consumer as we can.

One thing I will say about the retail merchant. We must not expect him to handle honey on a small profit. His money is invested in his business and his time and shelf room is valuable. If we do not wish to allow him a reasonable profit, he will pile his shelves with goods that have a ready sale at a fair profit, and allow us to keep our honey.

WHAT WE SHOULD NOT DO.

If you have made arrangements with a merehant in a certain town to handle your honey, do not undertake to sell honey at retail in the same town. You can not expect anyone to be your customer and your competitor at the same time. Last winter in a certain city I sold comb honey to the merchants, but none of them wished to handle extracted honey. I then told them I should like to sell extracted honey direct to the consumer and they readily agreed to it with the exception of one that I visited He objected, so I sold him no honey and was under no obligations to him. Where one can make such arrangements it is all right, but otherwise it is best to sell direct to consumers or else leave the entire trade to the merchants if they will handle the goods.

WHY SHOULD HONEY BE WHITE?

There seems to be a tendency on the part of nearly all the bee keepers to rate white honey above the darker or amber colored honeys. Not only this but they give the consumer the impression that (so called) white honey is superior to the other colors. This I think is a mistake. We should teach the consumer that honey may be strictly first-class without being white. The public or the purchaser is fastideous enough as it is without being taught that nothing is good unless it looks especially attractive to the eye.

At the meeting of the National Bee Keepers Association at St. Louis something over a year ago, some one had a sample of honey that was almost as clear as the purest water. Yet this honey was not fit to eat. On the other hand we have a number of amber honey that are equal to almost any of the white honeys.

Basswood is a light colored honey

and is highly prized by many, but for my own use and with the other members of my family it is neglected and autumn flower honey used in preference. About a year ago I brought to the house part of a five gallon can of basswood honey, and after having some of it on the table a few times, wife and the children put in a claim for some other kind, which was supplied and the basswood remained in the kitchen unused, and a few days ago I took it back to the honey house.

When it comes to white clover honey there is no denving the fact that it has an exquisit flavor hard to beat and seldom equaled, and this is probably the main reason why white honey ranks higher than the amber colored and why many of the light colored honeys are branded and sold under the name of white clover. Only last winter I purchased a small bottle of honey that was put up by a very reputable dealer and one who has a large trade in bottled honey. It was labeled "white clover," but if there was any white clover about it there was not enough to give it the flavor that white clover has here in Missouri. No doubt, however, this pleases the consumer and the same honey under a different. would not taste name so good to him. This reminds me of a customer who orders Spanish needle honey from me. I have never told him that it is Spanish needle honey, but when he orders I know what he wants and send him autumn flower honey. The truth of the matter is there is probably not enough Spanish needle growing within a radius of three miles of my apiary to furnish two gallon of honey. But if I told him that this honey is mainly from boneset and smart weed he would likely doubt my word, so why should I undeceive him?

Comb honey should be put up a

neat and clean as possible. The combs should be free from travel stain and the sections well scraped, but there is no reason to give the impression that only honey that is capped white is of the finest quality. Body and flavor should have more to do with the grading of honey than mere color, and this will apply probably with greater force to extracted than to comb honey.

THE TERM WHITE.

This term when applied to comb honey is quite appropriate, for some hinds of comb honey when newly capped and not travel stained, presents a surface almost as white as snow, and from this the color of comb honey or more properly the capping of comb honey range up in darker hues until we have almost brown, and in case of very old honey that has been a long time in the hive and much travel stained it is nearly black. But how about extracted honey? Can we use proper language and say of extracted honey that it is whole?

If some one should speak to me about a whitehouse I would know that it was of about the same shade as new fallen snow. It would not appear to my mind as sonething that could be seen through. I am aware of the fact that wines are spoken of as white wines and red wines and that the term white is applied to about all collorless liquids, but this does not make the expression correct. About all wines that are not red, or more properly pink, are called white wines yet they range from almost transparent to dark amber. The same rule applied to honey would make practically all extracted honey white, while in fact no liquid so far as I know is white unless it contains some solids or coloring matter in suspension. Milk is white, or nearly so, but it contains several things besides water. Lime and water is white but it is the lime that makes the whiteness. Why not then call things by their true name?

In the quotations of prices we find extracted honey spoken of as white and dark and sometimes as light amber and dark. When extracted honey is practically transparent, why not use. the word clear? It is no longer and conveys the correct meaning. I would suggest the following terms: Clear, light amber, amber and dark amber. This would give a more definite idea of the pirticular shade of any sample of honey. In my humble opinion the word dark should seldom be applied to honey. I once raised a crop of honey-due that was about the color of dark sorghum molasses and this might well have been called dark. As the matter now stands there are only two kinds of extracted honey on the market-white and dark and both words are improper and indefinite. In some cans we find the word amber used which is much more appropriate.

If I should tell the reader that my cistern was full of white water I presume they would conclude that I had spilled a very large pail of milk into it. Why not call clear honey, clear honey instead of white and amber colored honey, amber instead of dark? Who ever saw a sample of white extracted honey? I am sure I never have.

Why does not the poet or novelist speak of the white babbling brook?

IGNORANCE ABOUT HONEY.

In the October Bee-Keeper Review Hutchason relates an opinion at the Grand Rapids, Mich., fair. He sold a boy of about 14 years of age a chunk of comb honey. He went as far as the door, stopped, looked at the honey, and then come back in a sort of a sleep-

ish way and asked: "Mister, is this stuff that the honey is in good to eat, too?"

When we give this matter a sober thought for a short time is it any wonder that there is such dense ignorance regarding honey? Take our large cities as a whole and probably not one per cent of the entire population has any idea of a modern method of bee keeping. A certain per cent of them have spent the earlier part of their lives on the farm and memory carries them back to the time when a half dozen gums occupied the space beneath the spreading branches of an ancient apple tree in one corner of the yard or garden. They were kept in boxes or sections of hollow trees and little attention paid to them except at swarming times and in the autumn when a part of them were murdered with sulpher fumes their honey taken. Nothing known about controlling swarms and the orginal colonies continues to send out after swarms until they were practically exhausted and became the prey of the wax moth worms and the majority of the after swarms fared the same fate. Under these conditions ten or twelve pounds per colony was probably a fine average for the ordinary farmer-bee-keeper. No doubt many of the more intelligent done much better, but they were the exceptions and not the rule. Is it any wonder then that these same people when they see beautiful white combs of section honey put up in neat shiping cans with glass sides, are ready to believe that it is not the production of bees, but the invention of man. As I said they have no idea of modern apiculture. They know nothing of the score of bee-keepers who number their colonies by the hundred and many that have thousands under their management and count

their crops of honey by the ton instead of by the pound. They can not imagine where the immence supply comes from and hence are the more ready to believe that it is manufactured. We ourselves can hardly realize the wonderful progress that has been made in apiculture in the last fifty years. Take a man of fifty or past now a dweller in some thriving city. His mind is occupied with finances and his energy is devoted to battling for supremacy of the many others engaged in the battle for wealth and power.

When this same man was a boy on the farm modern apiculture was practically unknown. Only in a few scattered localities was it making any progress. He has made no study of apiculture, nas probably not given it a passing thought. How then is he to know anything about the production of honey by the methods in use today? If this man is entirely ignorant on the subject, how then is the younger generation born and raised in the cities, many of whom do not know a corn field from a wheat field. to know anything about modern apiculture?

It is time that we devote more of our time and energy to the education of these people! We should teach them what honey is, how and where it is produced and that it is a delicious, wholesome and nutritious food and not a luxury or a mere medicine, to be used only in case of colds.

Bluffton, Mo, Oct. 30, 1905.

BEE TREES.

MYTON, UTAH, Oct. 22, 1905.

Myton is a new town in the Uniah Indian Reservation. I was camping here and awaiting the town lot sale in September. I found two bee trees close to camp and soon had them in

box hives. The only box I could get suitable was an empty box at the only store with red letters on one end reading "Ten Year Old Atherton Whiskey." But being almost the size of a dovetialed hive I used it for a much better purpose. I had no trouble getting the bees transferred. They proved fine colored "Italians" and were tame. In one tree I saved 40 pounds of fine comb honey, after filling my hive full of comb of mixed brood and honey. In the other tree only a few pounds of honey was present, so I have been feeding them for past time. After falling the tree ! commenced sawing and splitting from below and smoking the bees up, taking the comb out as 1 worked up the tree. Then I placed my new hive with the brood comb arranged in it the best I could over the space I had taken the comb out of and cut a hole above and smoked the bees back, waiching for the queen. I found her and taking her in my fingers, placed her in the box, when all the bees went in. I moved them in the afternoon and the bees at sun down seemed to be working as they flew off and returned to the hive as if happy-(probably carrying water). I have visited only three places where bees are kept and 25 miles is the closest place bees are kept from the trees I cut. A Mr. Prior at Whiterock with 200 stands and Mr. W. Richinsat Vernal, Utah, has 250 stands. Prior's at Whiterock are Indians. I noticed the bees were neglected in all cases, weeds growing up in front of the hives, touching the front of the hive. honey season was poor here in Utah the past season. If any reader of the Progressive Bee Keeper cares to know of a good plan to locate a bee tree I have one sure and easy. I can go to bee trees as easy as an old coon dog to a coon tree. J. H. LEWIS.

THE NATIONAL CONVENTION.

Another slight postponement of the National Convention seems to be unavoidable. The Fat Stock Show upon which we have depended for reduced rates on the railroads, has been postponed two weeks. The reason given is "The inability of the builders of the amphitheater to secure structural steel for the same," and they don't wish to hold the show out of doors, hence the delay. Of course, there will be no suicidal attempt to hold a convention without excursion rates. The executive committee has decided to postpone the convention two weeks in order to take advantage of the Fat Stock Show rates. The dates for the Convention will now be December 19th, 20th and 21st.

The place of meeting has also been changed to the Bush Temple of Music, corner of Clark street and Chicago Ave. This was done because it was feared that the accommudations at the Revere House might prove too limited. The Chicago bee-keepers, with their customary enterprise and liberality, will pay for the use of the hall. It is only five minutes walk north from the Revere House, which will be headquarters for the members, This new place of meeting is in a new building where everything is modern. There are adjoining committee, rooms toilet rooms, good drinking water and elevator service both day and night.

PROGRAM.

FIRST DAY.

Evening session-7:30 p. m.

Wax-Rendering Methods and their faults—O. L. Hershieer. Buffalo, N. Y.

Can the Tariff on Comb Honey be Tinkered to the Advagtage of the U. S. Bee-Keeper?—Hilbreth & Segelken, N. Y.

SECOND DAY.

Morning Session-9:30 a. m.

How Many Bees Shall a Man Keep?— E. D. Townsend, Remus, Mich.

Short Cuts in Bee-Keeping—M. A. Gill, Longmont, Colo.

Producing Both Comb and Extracted on the Same Colony, Jas. A. Green, Grand Junction, Colo.

Question Box.

Afternoon Session-2:00 p. m.

The Control of Increase—L. Stachelhausen, Converse, Texas.

Migratory Bee Keeping—R. E. Holterman, Brantford, Canada.

The Dietic and Hygenic Relation of Honey, by Pr. Eaton.

Question Box.

Evening Session-7:30 p. m.

Contageous Diseases Among Bees and How to Distinguish Them—Dr. R. Howard, Ft. Worth, Texas. Experimental Apiculture—Dr. E. F. Phillips, Washington, D. C.

THIRD DAY.

Morning Session-9:30 a. m.

The Honey Producers' League— Can't it Help Bee-Keepers?—R. L. Taylor, Laper, Mich.

The Business End of Bee Keeping— N. E. France. Platteville, Wis.

Successful Experience in the Making of Honey Vinegar—H. M. Arnd, Chicago, Ills.

Question Box.

Afternoon Session-2:00 p. m.

In What Way Can Bee-Keepers Secure Their Supplies at Lower Prices?—W. H. Putnam, River Falls, Wis.

How the Producer and Dealer May Advance Their Mutual Interests— Fred W. Meth, Cincinnati, Ohio. Question Box.

Evening Session-7:30 p. m.

What Have We to Hope for from the Non-Swarming Hive?—L. A. Aspinwall, Jackson, Mich. Poultry Keeping for the Bee Keeper

-E. T. Abbott, St. Joseph, Mo.
W. Z. HUTCHINSON, Secretary.

MARKETING HONEY.

N. E. FRANCE. -

Have for sale only first-class article of honey that has been ripened in the hive, and if it be extracted honey, to be sealed in as short time as possible from hive. Well sealed and capped honey, when first extracted should be put in deep storage tank just long enough for all little specks of foreign particles to come to surface then that skimmed off and the honey sealed at once in the retail package. If the honey gets granulated it is easily damaged in liquifying if allowed to get too warm.

Always have a first-class article and sell it for what it is, -clover, basswood or even buckwheat, customers soon learn what suits them best for money expended. The honey package must be clean, neat and should be nicely labled. See how all canned goods are sold at grocery stores. The only honey I ever had hard time to sell was some a bee-keeper shipped me to sell. It was a mixture of unripened honey from clover and fall bloom. With good quality of even buckwheat honey by little effort it will easily sell. The every-day laboring man is a good customer, also a reliable grocery dealers. I sell for cash. For home market I prefer the 2, 3. 5 and 10 pound friction top syrup cans, labeled and for shipping the new 1905 round jacketed 5 gallon can. Either kind are shipped at fourth-class freight rate.-Rural Bee-Keeper.

Get your friends to subscribe for the Progressive, the bee-keeper's best friend. Fifty cents the year.

DISTRIBUTION OF QUEEN BEES.

United State Department of Agriculture. Bureau of Entomology, Washington, D. C

It has been customary in the past for the Bureau of Entomology to distribute a limited number of queen bees of the more rare varieties to bee keepers. This distribution is not intended to be general, since that would be impossible, and, to prevent misunderstanding, the following method, to be used in all future distributions, is announced:

It is desired that some of the less common varieties which have proven so good may become more widely known among the bee keepers of the country, to take the place, in as far as possible, of the common black bees and of certain strains of Italian bees which seem to have deteriorated.

Carniolan bees are very prolific and are, at the same time gentle, and there are records to show that as honey producers they are excellent. The recently introduced Caucasion bees, which have attracted considerable attention, are the most gentle bees known at the present time, and records of honey production now coming in indicate that they are excellent. The Cyprian race, which has been criticised on account of its temper, ranks second to none in honey production.

Of these races the Carniolans are sold in this country to some extent, and the Cyprians in less number; so far no queen breeder has offered Caucasian queen for sale, and there is, without doubt, an opportunity for a wide sale of these queens, as evidenced by the request which come to the Bureau of Entomology.

The Bureau can do more toward the

wide introduction of these races by inducing reliable men to take up rearing of pure-bred queens than by a more general distribution. It is not the purpose merely to give away queens, and the future distributions will be limited as follows:

To any experienced queen breeder who will guarantee to rear queens and mate them purely in considerable numbers for general sale, the Bureau will send, as far as the supply will allow, one high-grade breeding queen, mated and carefully tested. In addition, several queens whose meeting are not know will be sent for drone production, since drones are not affected by the mating; all queens. however, will be from good stock, the number to depend on the supply at hand. The breeder making the request must give evidence of his ability to rear good queens, must agree to offer at leat 200 pure-bred queens a year for sale to the general public and must not ask for them an exorbitant price. It is the opinion of the Department that 20 per cent more than the current price for Italian queens would be fair. It will also be expected that in future years the breeders will do their utmost toward the improvement In honey production, at the same time maintaining the purity of the races. The Bureau will be glad to aid breeders of this class to its utmost ability. but will not aid in any way a breeder who offers for sale or sells crossed hybripe of the various races, except in the case of untested queens, and even in that case, every possible effort should be made to get pure matings,

After this distribution, all inquiries to the Bureau will be answered by giving a list of reliable breeders, including those who have received stock from the Government apiary; and the name of any breeder who knowingly

sends out inferior stock will be dropped. It is not the purpose to interfere with the private business of the person receiving queens, but these precautions are taken to protect the beekeepers of the country.

No applications for queens under other circumstances will be considered. All applications will be considered in the order of their receipt.

Yours respectfully.
L. O. HAWARD, Entomologist
Approved: JAMES WILSON, Secretary of Agriculture,

EXPLANATION OF STANDARD FOR HONEY.

United States Department of Agricul ture Bureau of Chemistry.

On December 20, 1904, the Secretary of Agriculture, acting under authority of Congress and upon the recommendation of the Committee on Food Standard of the Association of Official Agricultural Chemists, proclaimed the following standard for honey:

Honey is the nectar and saccharine exudations of the plant, gathered, modified, and stored in the comb by honey bee (Apis mellifica). It is laev-rotatory, contains not more than twenty-five (25) per cent of water, nor more than eight (8) per cent of sucrose.

This standard was adopted after careful publication of an earlier suggested standard as a basis of criticism and after careful consultation with leading authorities in apiculture.

Since the standard was issued many letters have been received from bee-keepers representing many of the States of the Union, expressing a desire that the standard should be changed so as to avoid the exclusion from standard honey of all honeys that con-

tain honey dew. In support of this plea, it is urged that the beekeeper is unable to prevent the introduction of some honey dew, whether taken directly from the plant or from the aphis, and that small quantites are not injourious to the honey.

These requests being brought to the attention of the Committee on Food Standards at its meeting in Chicago, beginning May 29 last, the Committee adopted the following minute:

The standard does not in any way exclude small quantities of honey dew from honey. We realize that bees often gather small quantities of honey dew that can not be detected in the finished product by chemical means and does not damage its quality. It is only when relatively large amounts are gathered that the quality of the honey is imparied, and it fails to meet the requirements at the standard. It is generally agreed that such a large amount of honey dew is injurious to the quality of the product which can not then be properly regarded as honey.

STATE ASSOCIATION MEETING.

St. Louis, Me., November 7, 1905. Dear Sir and Brother Beekeepers:

Herewith I send you copy of the proceedings of the annual meeting of the Missouri State Beekeepers Association at Sedalia Aug. 22nd and 23rd, 1905.

The minutes of the first day were spread on record by your former Secretary, Mr. Cary, the second day's minutes were recorded by me from the stenographer's report.

Mr. Geo. B. Ellis, Secretary of the State Board of Agriculture, promised at the meeting to issue a bulletin on beekeeping. This bulletin is in print now and will contain besides some other essays the two papers read by

me at our Sedalia meeting which brings them to the knowledge of all the members without any expense to the Association. The bulletin will be forwarded to all the members of the Association, to the parties on the general mailing list of the Secretary of the State Board, to about 1500 beckeepers of whom I have the addresses and to everybody who will write the Secretary of the State Board of Agriculture and ask for the bulletin.

I expect that this bulletin will do some good, as it goes to beekeepers which we otherwise do not reach and the attention of those beekeepers will be called to the efforts of our Association and will prepare the way for our work with our next legislature.

It is the intention of our Association to bring be ore our next legislature a bill providing for an inspector of apiaries and also a bill providing a heavy penalty for the sale of any article under the name of honey which is not the unadulterated product of the honey bee. If such legislation can be secured the beekeeping industry will be greatly benefitted and it is to the interest of all members to do all in their power to assist in having such a bill passed by our legislature and signed by our Governor.

The convention passed a resolution asking every member of our Association to constitute himself a committee of one to form a beekeepers club in his county and by thus doing so bring beekeepers of his vicinity in closer contact with each other and to increase the membership of the Association. We have such a club here in St. Louis and this club has done much good for all its members.

I will cite here only one case, there was an apiary of 80 colonies for sale across the river in Illinois. **T**wo of our club members went over to buy

bees, they bought 15 colonies paying some money or them. They afterwards concluded to take 30 colonies; they went over with a wagon to get the bees, but having been taught by your Secretary to detect foulbrood they went to examine the colonies and found everyone of them effected with foulbrood.

The knowledge acquired by being memoers of our club saved these members considerable money and to their neighbor beekeepers great loss; these bees were later sold at public sale and through your Secretary's efforts they were all offered together and were bid in by a beekeeper of that county for the purpose of destroying them.

To go back to our club: Every member of our club is also a member of the State and of the National Association. Our club has at present 27 members. Every member has been taught to recognize foulbrood when he sees it for this purpose.

It is the intention of our club to locate every hive of bees in the city of St. Louis and the surrounding counties and to bring as many beekeepers as members to our club as possible. By doing this we expect to fight foulbrood as far as we can and to enable the bee inspector whenever we succeed in having him appointed to inspect every hive of bees which our club members are not able to inspect themselves.

We are also endeavoring to have all bees put in hives in which combs can be moved so as to facilitate inspection and treatment if colonies are found to be diseased. Much spreading of foul-brood has already been prevented by our club.

I earnestly urge all members of our Association to form such clubs in their vicinity as much loss can be avoided by the early detection of foulbrood should it appear in your vicinity.

It may be argued that the production of honey may be stimulated by the formation of clubs and thereby the home mark+t be overstocked with honey; it is my opinion that the consumption of honey will also be stimulated and the larger production will thus be counterbalanced.

I have dwelt so long on the formation of beekeepers clubs because I believe that nothing will be more effective in assisting to eradicate foulbroad from this state and benefitting one beekeepers more than the formation of the clubs and your secretary will do all in his power to assist in this work.

Your secretary has been instructed by resolutions to ask all members for free will contributions to the funds of the Association besides the dollar annual dues and I hereby ask every member of the association to contribute as liberally as he feels he can afford. I ask that these free will contributions be added to the dollar sent as annual dues and to state that it is a free will contribution.

Please make remittance in Postoffice money order or express order as most convenient, as checks of country banks cost 15 cents for collection.

The income of the association has not be a sufficient to do the work laid out by the association as half the dues which come in have to be sent by your secretary to the manager of the National Association, therefore the officers of your association have to a great extent been compelled to bear the expenses of the association themselves.

Printing and mailing takes money, and as we intend to increase our membership and show the bee keepers of our state the necessity of legislation in our interest more money will be needed than is coming in from annual dues.

At the Sedalia meeting a numb r of members have made a star: to this fund and I hope that the members may respond to this call liberally. I wish also to call the attention to the annual dues which are payable now and ask you to kindly remit.

I wish to call attention to our national Convention which will take place Dec. 5, 6 and 7, at the Revere House, corner of Clark and Michigan streets in Chicago during the fat stock show when exceedingly low rates may be secured on the railroads. Rates at the hotel are 75 cents for a room alone or 50 cents each where two occupy the same room. Meals are extra or may be secured at nearby restaurants. I hope many of our members may see their way clear to attend the National Convention. Convention will probably be postponed till December 20th

In conclusion I wish to ask the members to make all possible efforts to increase our member-hip and to send the names of so ne new members when remitting their dues.

Very truly yours, ROBERT A. HOLEKAMP, Sec'y

[For correct date and place of meeting of our national convention in Chica go, read convention notice printed in this issue]—Ed.



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 bost carefully selected materials only. It may cost a few cents more pergallon, but considered from the stand-

point 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 careful and painstaking bee-keepers.

m 29 pa ka o galari 199 pa ga o ga alam 29 pa ga alam alam alam alam alam 29 pa mula pa mula pa ba alam 199 pa



		r						14				
One Quart				 							S.	
One-half Gal	110	n										į,
One Gallon.									Ų		M	

Five Gallon Can. per gallon.

LEAHY MFC CO.

HIGGINSVILLE, MISSOURI.

We Are Large Distributors of

HIGGINSVILLE BEE SUPPLIES

We can furnish the "Full Line" at Higginsville prices. This means saving of freight.

Write for Bee Supply Catalogue

Blish, Mize & Silliman Hardware Co., ATCHISON, KANSAS.

BEE BOOKS.

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

THE AMATEUR BEE-KEFPER, (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.

SCIENTIEIC QUEEN-REARING, by G. Doolittle; price \$1.00.

LANGSTROTH ON THE HONLY BEE; revised by Dadant; price \$1.15.

LEAHY MFG. CO. Higginsville, Mo.

Money in Poultry

If properly attended to there is much money in raising Poultry. Learn how to do it right. Get the experience of old successful breeders and find a sure way to become independent by subscribing for the POULTRY CULTURE, the best edited and most up-to-date poultry magazine in America. Subscription price only 50 cents a year. Address

Poultry Culture Co., Example with the conference of the conference

FOUNDATION Mills for Sale

We have just taken in a second hand Foundation Mill in exchange for goods. This mill has $2\frac{1}{2}$ inch roll, the round bottom cell, of which the foundation comes off so easy, and from the looks of the mill, I do not think it has ever been used. The price of such a mill is \$30.00 and we will take \$18.00 for it on cars at Higginsville. This is a very little over half price.

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

cheap. Write for price.

LEAHY MFG. CO.,

HIGGINSVILLE, NO.



Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Murm & Co. receive special notice, without charge, in the

Scientific American.

A handsomely illustrated weekly.

culation of any scientific journal.

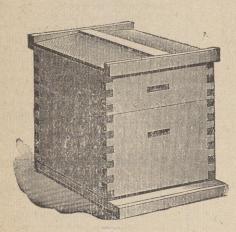
year, four months, \$1. Sold by all newsdealers.

MUNN & CO. 361Broadway.

Branch Office, \$25 F St., Washington, D. C.

Nothing So Profitable on a Farm

As a Few Stands of Bees

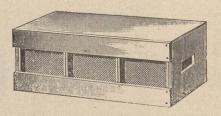




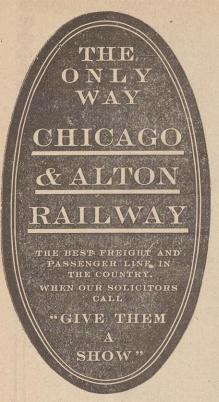
They work for nothing and board themselves, and require but little time to handle. We have just received a carload of the famons 'Higginsville' supplies, consisting of Dovetailed Hives, (like cut) Sections, Foundation, Extractors, Shipping Cases, Smokers, BeeVeils, Swarm Catchers, etc.



Write for New 1905 Gataog. Just Out . . .

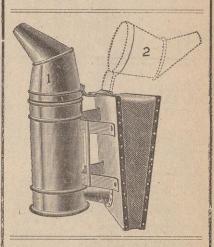


Topeka Bee Supply House,



S. A. VERMILLION, Agent, Higginsville, Mo.

The "Higginsville" — SMOKER—



A Good Smokerfora Little Money

"The Higginsville Smoker is a dandy with a big 'D."

J. M. MOORE, Holden, Mo.

Price 75c; by mail \$1.00

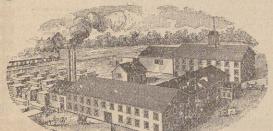
Address, LEAHY MFG. CO.,

HIGGINSVILLE, MO.

Bee Supplies

We have one of the best equipped factories in the west. Carry the largest stock and greatest variety of everything needed in the apiary, assuring

best goods at the lowest prices and prompt shipment. We want every beekeeper to have our Free Illustrated Catalog, and read description of Massie Hives, Alternating Hives, Ferguson Supers, and other new articles. Write at once for Catalogue. We also manufacture TANKS of either wood or galvanized steel, all sizes. PRICE LIST FREE.



ACENCIES:

Trester Supply Company, Lincoln, Neb.

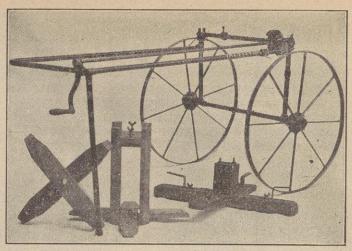
> Shugart & Ouren, Council Bluff, Ia.

I. H. Myers, Lamar, Col.

THE E KETCHMER CO.

Council-Bluffs, Ia

Boss Ree Improved



PRICE OF REEL \$7.00 Cart Box Extra - 1.00 Adjustable Spool for Smooth Wire extra 1.75

Address CHARLES ERNST, Higginsville, Mo.

Has demonstrated to the users that it is one of the most practical and useful implements that has ever been introduced to fence builders. It is bevond value for barb wire fence repairing as well as for building new fences and also for handling checkrower wire. It handles the wire with ease and

quickly with success. There is no danger of tearing and scratching yourself and clothes by using the BOSS Reel as you do not come in contact with the wire either winding or unwinding and you need not lift the speol off and on, just dump the machine over and out it is. All who have had experience in rolling wire on old barrels as is so extensively used by the farmers and the u-e of so called wire reels which are stationery and you are forced to drag the wire over the ground, know by experience that you gather a great amount of foreign substance, such as corn stalks, dead grass and weeds. The boss is almost a perfect balance machine. It is self propelling and also made with hand cart box for use about the farm every day. With this machine the coil of wire is readily slipped off of spool when wound, thus you need but one spool for taking up wire.

UNSOLICITED TESTIMONIALS

To whom it may concern:

I can cheerfully recommend the "Boss Wire Reet," manufactured by Mr. Chass. Ernst. Higginsville. Mo. The machine is first-class in handling wire, as one man can with it, in that this of work, than first-etass in handling wire, as one man can do more with it, in that line of work, than three men could without it. It is a labor saving machine and also saves your hands and clothes from being scratched and torn. It is made durable enough to last the purchaser willfully a line short, the machine is all O. is made durable enough to last the purchaser a lifetime. In short the machine is all O. K, and the farmers of the whole world are greatly indebted to Mr. Ernst for inventing such a very useful article in the time of history when needed, therefore wherever the "Boss Wire Reel" goes, my recommendation most cheerfully goes with it. Sincerely, Enwarn Ergeric

EDWARD FREE E. New Haven, Mo., R. F. D. No. 1. January 25, 1905. To whom it may concern:

That Mr Chas. Ernst's Wire reeling aparatus is one of the most convenient contrivances for building wire fences, to unreel the wire as you can place a spool of wire in them almost as quick as you can pick it up. Or for the taking of old wire fences down, by placing an empty spool in the reeling machine and by turning the crank it propels itself. I have observed its utility for the past three years and find that one man can do the work easier than two the old way of carrying the spool on a stick, or rolling the old wire up on a barrell. This wire reeling machine is a time saver, which is no our days a greater object than a money saver. But it saves both time and money also, let the good work go on. Yours respectfully, Higginsville, Mo. G. A. RAASCH.

"The American Boy"

MAGAZINE

The Biggest, Brightest, Best Boys'
Magazine in the World.

Boys' like It Because it treats of everything boys are interested in and in the way that interests them.



PARENTS LIKE IT

and like their boss to have it, because of its pure and manly tone and the high character of its contents. It is the only successful attempt to chain a boy's interest and give him the kind of reading matter that he wants served to him in such a way as to stir his ambition, uplift and inspire him. Boys want reading matser as much as "grown-ups" if they can get the right kind. If parents supply them the wishy-washy kind, or none at all, they usually manage to get the kind they oughtn't to have, and boy-bandits and would-be "Deadwood Dicks" are the result

Your Boy will Like "THE AMERICAN BOY"

and you will like him to have it, for it is interesting, instructive and educative. Authorities pronounce it the ideal boys' magazine. It has been a tremendous success, gaining nearly 125,000 subscriptions in four years, and the parents of our subscribers say it deserves a million more. As one parent writes:

"In my opinion THE AMERICAN BOY works a two-fold purpose. It makes a man out of a boy, and it makes a boy again out of a full-grown man."

No publication for young people is paying

so much money for high-class literary matter for its readers as is "The American Boy.

Kirk Munroe's New \$1000,00 Story Now.

Subcarintion price of "The American

Boy," 1 yea	r or	THE	American	\$1.00
Progressive Bee-				
,	Total			\$1.50
Both for			S	1.10

Address,

LEAHY MFG. CO.,

Higginsville, Mo.



Hours of Comfort and Safety

are in store for the happy folks who own an Eagle Steel Lawn Swing. It gives a new idea of comfort. Constructed on an entirely new principle it swings as lightly as a feather in the breeze; safe as a baby's cradle; comfortable as an easy chair. No matter how high or low, fast or slow you swing, the seats remain upright. No tilting backward or forward. Perfect mechanism. Substantial frame of carbon steel prevents all accidents.

EAGLE STEEL LAWN SWING

is made for service and hard wear. The seats can be turned back to anyangle. If you desire the table or steel head rests, we have them for you. It is not a cheap, one season affair, but a swing built to last a lifetime. Nothing to get out of order. When folded occupies but little space. A child can set it up or take it down in a few minutes. Artistically finished and every part perfect. Send for free descriptive booklet that answers every question you can think of.

A. BUCH'S SONS CO., Elizabethtown, Pa.



$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Smoke Engine, Largest Smo- ker Made		nch S	tove\$	Per Doz.	Mail	Each \$1.50
Large	Doctor	31	66		9.00		1.10
Little Wonder	Conqueror	3	66	44	6.50	(6	1.00
	Large	21		44	5.00		.90
Honey Knife	Little Wonder	2	" wt	. 10 oz.	4.50	66	.60
	Honey Knife				. 6.00		.80



more than for tin, as

000

copper does not rust. They should last a lifetime. Our smokers all burn without puffing or noise. The 4-inch, the largest bee smoker made, has 381 holes in the steel copper does not rust. They should last a lifetime. Our smokers all burn without pulling or noise. The 4-inch, the largest bee smoker made, has 381 holes in the steel grate for air and draft, lequal to an opening two inches square) of course it goes and does not go out. While every bee keeper knows that smoke is indispensable to modern bee culture, few are aware of the principle on which its value depends. Hence the liability to a bad choice in selecting a smoker which, with decent care, will last 26 or more years. I use 26 as the magic number because Bingham patent smokers have been on the market in England and America about that length of time, and thousands of them have served faithfully the best bee keepers on earth at lenst half that time. No other smokers have any comparative record. Bingham smokers are the standard the world over. They measure just as they are advertised and no bee-keeper has ever complained, while everyone has pronounced it "the best." even perfect. While all our smokers are made on the same principal, they are of different sizes and different price, adapted to any size apiary or purpose. If I had time and space to explain how valuable a smoker that wo. Id hold a quart of sound, dry maple wood is in an aniary. I have but little doubt but that most bee-keepers would huy our new tinch SMOKE ENGINE. for this and the next ten years' use, and keep their old, half worn smoker as a reserve when two smokers are needed (as they often are to keep bees away from some other hive or place, while the bee-keeper with his reliable smoker needs to be elswhere.

As for Bingham Honey Knife it is copied in every country on earth, as are Bingham Smokers. There are neither knives or smokers to compare them with, all others of practical value are good just in proportion as they are like the original.

of practical value are good just in proportion as they are like the original.

F. BINGHAM. Farwell. Mich.

We Make a Specialty of Sections

Being located in the great BASSWOOD timber belt of Wisconsin admitted by all to be the best for making Sections. A general line of Bee-Keepers' Supplies in stock, and at prices with the times. Write for Catalogue and prices. Free for the asking.

Marshfield Manufacturing Co.,
Marshfield, Wisconsin.

J. W. Rouse & Co.,

MEXICO, MO.

Aparian Supplies, Bees and Queens

The Amateur Bee-Keeper.

An 80 page book for beginners. Fully illustrated By Mail 25c

Latest improved Hives, Sections, Comb Foundation, Bee Veils, and Smokers. All kinds of Supplies at Low Prices.

Beautiful 28-page Catalog Free



SHEEP'S BACK TO WEARER.

We manufacture fine all wool cloths, in all the latest novelties and colorings, suitable for Men's, Women's and Children's wear. Will cut in lengths to suit. Send for samples. Our prices will interest you.

GLENLUCE WOOLEN MILLS, Salesrooms, 404 BROADWAY, New York.



Prepare for success at the bar, in business or public life, by mail, in the ORICINAL SCHOOL, Founded in 1890. Successful graduates everywhere. Approved by bar and law colleges. Regular College Law Course and Business Law Course. Liberal Terms. Special Offer Now.

Catalogue Free.

Sprague Correspondence
School of Law,
733 Majestic Bldg., Detroit, Mich.

Bee-Keepers Should all Subscribe to

The American Bee Keeper

50c Per Year

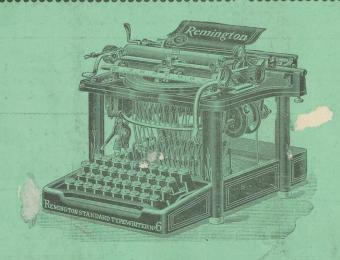
Established fourteen years. The best magazine for beginners. We will send it six months on trial for 20c.

Sample Copy Free.

Address.

The American Bee Keeper

FALCONER N. Y.



The Leading Business Men Buy

THE REMINCTON TYPEWRITER

BECAUSE it is the BEST investment, being the strongest and most durable of all writing machines, and has all the improvements known to the Typewriter world.

THE EXPERIENCED OPERATOR SAYS: "Give me the Reming ton. It can do better work, and more of it, with less effort on the part of the operator, than any other machine." Send for catalogue.

REMINGTON TYPEWRITER CO.

105 West Ninth Street.

Kansas City Mo

4 100