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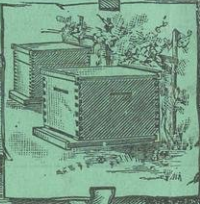
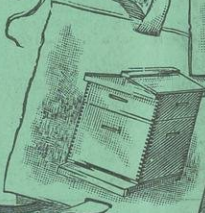
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MAY 1904



MUNNY HEISS CLEV. O.

PROGRESSIVE BEE-KEEPER

A JOURNAL
DEVOTED TO BEES, HONEY AND
KINDRED INDUSTRIES.



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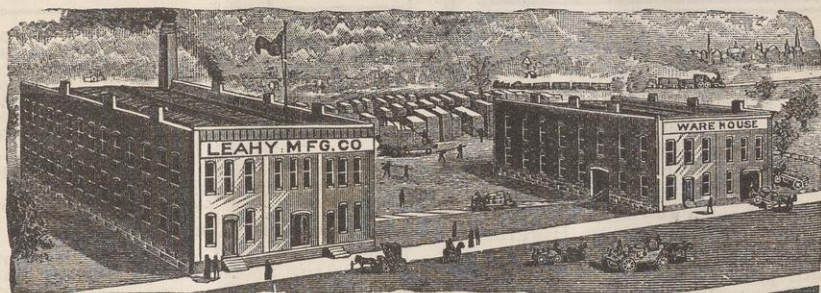
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No bee-keeper can afford to be without a library of bee books. A book costing from fifty cents to one dollar is worth many hundreds of dollars to one who would succeed. Every beginner should have a book suitable for beginners, (one that will point 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:

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Table of Contents.



Good Things in the Bee-Keeping Press.....	117
Conversation with Doolittle.....	120
"Pike" Attractions.....	123
Editorial.....	125
Pennsylvania Association.....	128
My Wood Nymph.....	130
The Cascades.....	133
Educational.....	34
World's Fair building.....	135

GOOD THINGS IN THE BEE-KEEPING PRESS.

SOMNAMBULIST.

A few thoughts taken from the Journal of Agriculture relative to "the Garden" I offer to beekeepers as these same ideas are applicable to keeping bees.

A garden is an endless source of amusement to young and old alike. It affords something new at which to wonder and admire daily, and so draw us

closer to nature and the world of wonders out of doors.

A garden is, in a way, as good as a liberal education; a promoter of the cardinal virtues, a gentle and patient and constant teacher. Says Charles Dubley Worner, "The principal value of a private garden is to teach patience and philosophy and the higher virtues, hope deferred and expectation blighted, leading directly to resignation. The garden thus becomes a moral agent, and a test of character."

As one becomes more and more interested, he becomes a closer and more intelligent observer, thus the valuable habit of close observation is formed. Gardening and bee-keeping are great health promoters; the exercise they furnish in the sun and open air being thoroughly wholesome and beneficial.

The season thus far has almost precluded exercise in either, being cold and wet fruit bloom struggled long for an opening the Easter hat taking the lead by far. But little variation in the month of April, mostly showers and sunshine very shy about putting in an appearance. May too, has opened up in much the same manner. Agricultural pursuits of all kinds are at a standstill, prospects rather gloomy. Let us hope that the old adage "a poor

beginning makes a good ending" may prove itself true in this instance.

The prince of American Beekeepers W. L. Coggshall gives in his experience in the April number of the American Bee-keeper, some points of which I here reproduce:

"During the winter of '88-'89 he and his brother made, from the logs, 150 Langstroth hives, which hives are in use today. He thinks the square joint is better than a miter, or a dovetail or durability. Many in this section of the country are of the same opinion.

Mr. Groggshall thinks the floating apiary not only a possibility but a probability. Thinks the time for its successful debut is just at hand and says his "hands itch to assist in carrying on the scheme."

With but four exceptions his twenty apiaries represent someone who has become discouraged at bee keeping. Up to 1894 he made the bees pay for themselves the first year.

Of different size frames he says "they require different manipulation and that is about all I see in different hives."

"The first requisite to success is the honey source; second the man and appliances third.

On page 82 it is claimed by an extensive bee-keeper that foul brood does not flourish where bees have access to salt. One of the editorials reads:

Bee-keepers frequently report having secured "three-fourths," "one-half," "one-third" or "one-fourth" of a crop of honey. Yet no one ever seems so fortunate as to get a "crop and a half." How much is a "full crop?"

T. S. Hall, in the March number of American bee-keeper speaks some good words for the black bee, as follows:

"They are a hardy race that winter well stand the severe changes of spring without dwindling; are never found to be diseased in any way. No such a

thing as foul brood, black brood, pickled brood or paralysis. They commence to breed very early—much earlier than the Itallians. The queens are very large and prolific; they cap their honey snowy white, are good workers, but not quite as good as the Italians. They will enter rhe supers almost at once when the first honey flow comes. In the spring they work better in the supers than the Italians, putting all their honey above the brood chamber, If they have the room they do not crowd out the queen like the Italians; they are fine queen-cell builders. Their objectionable points are their ill temper; they are more vicious than the Italians, when we smoke them down they come back just as quick as the smoke stops. Not so with the Italian. They are very excitable and will run off the combs when being handled and become the prey of robbers or the wax moth. They are very easy to become discouraged and seemingly just give up when they get weak or the wax moth gets into their combs. If we could eliminate these few objections they would be the best race we have; but those three points are very serious marks against them. If anyone has ever seen black bees with paralysis we would like to hear from them.

On Page 55, March number, Mrs. S. A. Smith lets her light shine in a way that leaves no doubt in the mind of the reader about her being a practical person and fully acquainted with the dispensing of honey on the market, a few of her points are given:

"The way to raise the price of honey, is to raise it. Set an honest price, and then stick to that price. Do not undersell another bee-keeper one cent. If you do so today, tomorrow the other feller will be asked to undersell you; and the next day you will be asked to keep the ball rolling. Do not begin! I say.

Be very careful of your honey. Honey that is unripe, unskimmed and exposed to the air in large tanks or perhaps open vessels, in any humid climate, cannot be first-class, and I have truly seen just such honey for sale, and was asked by the grocer for my opinion as to whether it was honey or some other stuff. If you use your honey that way, you should not have anything for it.

If the wholesale market is low, do not help it down lower, with your honey. Fruit must be shipped when ripe, but we can keep our product for months. Then why hurry it off just as soon as taken from the hives?

If you say "I must sell, for I need the money very much," just ask yourself this: "What would I have done for money had I failed to get a crop?"

As it is very uncertain business, you often do not have the crop to sell; what did you do then?

Keep your credit good at your bank, and see which will pay the best, to borrow money to live on or sell your honey for anything you can get for it?

I can assure every bee keeper that there is a consumer who is just as anxious to get your honey, as you are to sell it, at a good price too.

There is too much difference between the wholesale and retail price. Think of honey selling in New York for 4½ cents per pound, and the poor who cannot afford to eat it, for by time it reaches them it costs 10 cents a spoonful.

As our attention is constantly called to the difference of price the producer receives, and the consumer gives, it behooves us to sell as directly as possible to the consumer, each one who so does lighten the burden the cities have to dispose of, and secures to himself all the profits. A little patience and extra labor will bring about the desired results.

The bee-keeper takes too much for granted. Because he knows his honey to be the genuine article whose merits have been sung through all the past ages, from the beginning of man, he feels secure in his fort, as it were and forgets that the little songs of praise must be constantly kept before the public and that those found in ancient history are slightly ineffective now, possibly from having been so long before the people. The people have a wholesome respect for age but are rushing pell-mell after something new, "the latest" always commanding the most profound respect. The long and short of it is, honey is not advertised to the degree that other products are and, the up to date catchy ads take the people and the dollars in, to the disgust and discomfiture of the sleepy bee keeper. To his disgust because he "knows" his product to be far ahead of the make-shifts the use of which cause it to move so slowly. Would you move your crop of honey, put it before the public that you have it, and although it is the same kind of honey that was produced in the days of Adam and Eve, it being the God-given article, no improvement possible, keep telling them all about its merits, there will be something new for some of them to learn, and then you have acquired another customer.

After you have caught your customer, follow the rule, once a customer, always a customer.

Fair and liberal treatment will make this rule work. When fishing for customers don't get out of patience when you observe the dear people strangling over a gnat and swallowing a camel as they do when consuming time in strenuous endeavor to ascertain if your product is strictly pure and not the least adulterated and finally conclude with buying a friction can or bucket of corn syrup, of its purity there is of course no doubt.

Don't get disgusted but laugh and grow fat or go at it again, with the next man you may succeed.

S. E. Miller's advocacy of friction top cans for honey is sound doctrine, but the very fact of their having been used to extensively in the corn syrup business, grates a little on our sensitiveness.

His experience with the commission houses agrees with mine and just as if "he had been there," and his conclusion that, "one can afford to devote considerable time and energy toward disposing it at a decent price" is the only one to be deducted from experience. His review of Missouri is encouraging, especially the sentence in regard to those March east winds not affecting the average length of life.

DIFFERENCE IN MILK.

According to a bulletin of the United States department of agriculture, nearly all milk used for direct consumption is sold by measure alone, regardless of value. This method is unjust to both consumer and producer. No other commodity is bought or sold with such disregard of food value.

It would be as reasonable to expect to purchase three pounds of round steak for the price of one as to buy milk with eight per cent. fat and that with two per cent. fat at the same price a quart. Milk containing a high per cent. of fat is not only worth more for food, but it costs more to produce than milk containing a low per cent of fat, and the price should be governed by its composition and food value and not by its bulk.

One hundred pounds of good milk contains 87 pounds of water, four pounds of fat, five pounds of sugar, 33 pounds of casein albumen and 0.7 pound of mineral matter or salts.

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CONVERSATIONS WITH DOOLITTLE.

HOW TO GET WORKER COMB BUILT.

"Are you very busy this afternoon, Mr. Doolittle?"

"Not extremely so Mr. Baker. What can I do for you?"

"I wish to have my bees build their own combs this summer; and whenever I try to have them do this, they seem bent on building drone comb. How can I prevent this?"

"When any colony is so weak that it has no desire to swarm, during or preceding the swarming or honey-flow, such a colony will invariably build worker comb, so that worker brood may be reared till the colony comes into a prosperous condition, providing they do not have sufficient comb already built."

"Why can I not use some of the weak colonies I often have in the spring in that way?"

"You can. Taking advantage of this fact I use all colonies which are too weak to store honey to advantage, at the beginning of the honey-flow, or as many as I wish for that purpose, treating them thus: Their comb is generally all taken from them excepting two, one having a little brood and considerable honey in it, and the other being as nearly as full of honey as possible, giving all the other combs having brood in them to other colonies so that they will be still stronger for the honey harvest?"

"Don't you leave any of the combs which they may have, having neither honey or brood in them for their use?"

"No. If I did it would defeat my object, for the bees would clean up such combs, and the queen lay in them, instead of the bees building any comb at all."

"I see. But excuse my interrupting.

Go on with what you do with the colony after you have taken all away but the two combs."

"I now put in one, two, and sometimes three frames having starters in them or frames which are partly filled with comb, just according to the size of the little colony after having taken their combs away."

"Excuse my breaking in again; but what do you mean by starters?"

"Take a strip of comb foundation one-half inch wide and as long as your frame is wide between the end-bars, and with melted wax stick this along the center of the under side of the top-bar of your frame, and you have a starter that will beat any other which I know of."

"And what do you mean by frames partly filled by comb? Where do you get these?"

"These are any combs which any colony of bees may have started at any time and not completely filled the frames with the same. Or they may be frames once filled with comb, a part of which may be drone comb, which I have cut out, or holes, which have come about by some accident to the combs, such as mice gnawing them, or the bees tearing them down to get out moldy pollen or something of that sort; or I may have allowed the bees to build comb when they are not in the condition to build worker comb exclusively."

"And will the bees patch up such combs as these, filling out with worker comb."

"Most assuredly they will if the colony is in the right condition."

"Well, that will be lots of help to me, for I have many combs partly drone and partly worker that I did not know what to do with, and now I will make the bees patch them. But go on or I may not know how after all."

"In all this work I always see that each little colony has a frame well fill-

ed with honey; for, should storms or cloudy, windy weather come on at this time, they would build no comb of any amount, and might starve; while with the frame of honey they will go right on converting that honey into comb, storm or no storm. If the right number of frames is given to suit the size of the little colony they will fill them quickly, especially when honey is coming in from the fields; and each comb will be filled with worker brood as fast as built."

"How long will they build worker comb?"

"If not too strong they will generally build comb of the worker size of cells till the brood begins to emerge from the eggs first laid in the newly built combs by the queen; but as soon as many bees emerge they are liable to change the drone size of cells; or if the little colony is quite strong in bees they may change the size of cells sooner than this if honey is coming in very rapidly."

"What is to be done then?"

"As soon as the first frames I gave them are filled with comb I look to see about how many bees they have; and if they are still well stocked with bees, or are in a shape where I may expect that they will exchange the size of cells before they reach the bottom of any frames they may have started with worker comb, I take out any full frames they may have already built, and thus put them in the same condition they were in when I started with that colony."

"Will they do as well in this way as they did at first?"

"They will not build combs quite as freely now as they did before, unless there can be some young bees emerging; so if I can, conveniently, I give them a comb containing mostly honey with some emerging brood (if they have such a comb it is left with them, which

is more often the case than otherwise) from some other colony, when they are ready to work the same as before. If just the right amount of brood is left, or given them, so that they stay in or about the same condition, they will build worker comb all summer by the apiarist supplying them with honey or feed when none is coming in from the fields. If not strong, but that I think they will build worker comb still longer, instead of taking the brood away, I spread apart the comb now built, and insert one or more frames with starters between, when these will generally be filled with worker comb before enough young bees emerge from them to change the size of cell."

"Suppose they do change the size of cell, what then?"

"One thing is always to be kept in mind whenever you find them building drone comb. The combs they then have, all except the one mostly filled with honey are to be taken away so that they may feel their need of worker brood again, when they will build cells of the worker size once more."

"Have you used this plan much?"

"To the extent that I have had hundreds of frames built full of worker comb in this way, hundreds completed that the bees had built partly full the season previous, and hundred if not thousands patched where I had cut out patches of drone comb which had gotten in in one way or another; or where I had cut pieces of comb having little larvæ in that were to be used in queen-rearing. In this way the bees fix these holes in any comb in a very perfect manner; in fact, very much better than any man can do it fitting in patches of worker comb as was the manner of fixing up combs having a little drone comb in them, during the past. Therefore I do not fear mutilated combs nearly as much as I formerly did."

"This has been an interesting and

profitable talk with me, and I fell very grateful to you for telling me so freely. I will be going now. Good day."

"Good afternoon. If you see any one of your bee-keeping friends who wishes a mutilated comb fixed so it will be a surprise to him, tell him to give it to a little colony fixed the way I have described to you, and let him see what nice work they can do patching with all-worker comb."—G. M. Dolittle in *Gleanings in Bee Culture*.

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PIKE ATTRACTIONS AT THE WORLD'S FAIR.

Inside the limits of St. Louis has risen suddenly as if in the night another great metropolis that will bewilder with its surpassing beauty and compell the admiration of all who see it. One almost wishes that after the Fair this capital of all Expositions could remain standing even though its avenues and buildings, its pale halls and many hued palaces were only peopled by the memories of the millions that passed through, and of the sound of the babal of tongues that rang out in the corridors of this gorgeous place of enchantment, for abode of enchantment it will be when its massive gates are thrown open to the nations of the earth.

To use another simile, it is a flower, many colored and exquisitely beautiful that has bloomed and in the heart of which are three petals that will quickly win the admiration of the visitor—namely the buildings containing the "Galveston Flood," "The Battle Abbey" and the trip "From New York to the North Pole."

The most absorbing condition exhibition will be that of the "Galveston Flood," and the most picturesque the trip "From New York to the North Pole" and to the people of this country the most interesting historically the "Battle Abbey."

They are all located on what is called "The Pike" the midway of the Exposition and are close together for the convenience of visitors. The "Galveston Flood" building contains a vivid illustration of the disaster which overtook this delightful Southland city and concludes with a picture of the reconstruction.

The vast entertainment is given on a stage that has proscenium opening 150 feet wide, the largest in the world, the building proper being 150 feet by

300 feet. It begins by showing Galveston at the close of a delightful summer day. Peace broods over land and sea as the sun sinks below the sky line leaving behind soft shadows and gentle breezes blowing from the gulf to the city whose inhabitants are closing up their business places and enjoying the hour. Shortly after a bank of clouds gather in the wake of the setting sun in cathedral like shape and from a phantom city. The cupolas, towering domes and lofty colonades are gilded into molten glory by the last artistic touch of the brush of the fading light. From the deck of an incoming vessel one can see the lights of the city gleaming through the night like stars, trains can be heard and seen running out of and into the city with lighted windows and the glowing port holes of the shipping in the offing indicate the life inside of the big hulls that swing lazily at their anchors.

From the land comes the sound of the angelus bells in the churches, adding sweet solemnity to the scene.

Suddenly the aspect of everything undergoes a change. The clouds have increased and are sweeping forward in a threatening manner. Rain begins to fall, the breeze has increased to a gale, lightning is viciously flashing its telegraph message to earth that a storm is approaching. The gale became a hurricane and the shrieking winds call the waters to a work of destruction. Responsive to the cry, the gulf heaves into white crested waves, and rolling forward dash on the shell beach. Provoked by the storm's lash, they rise higher and finally one gigantic roller, a very avalanche of water, sweeps forward and the city is engulfed. The scene beggars description. The cyclone, the howling tempest, the thundering waves, hissing rain and the spiteful lightning accentuate a disaster for Galveston.

Then when the tempest has done its

deadly work, the waters recede, the wind becomes a breeze like that of a lady's fan and the moon comes from her hiding place behind the clouds and we see a never and more glorious Galveston.

The realistic trip of "From New York to the North Pole" given in the "North Pole" building tells in a graphic manner how a vessel starting from New York attempts to reach the Pole but becoming jammed in the ice the party of discoverers make a dash over it by sleds to their goal. A tank of real water, 150 feet long 50 feet wide and 8 feet deep is required in this biggest of all water shows and one hundred men are used to operate the effects and machinery.

The opening scene shows the shipping in the North river at New York at dawn animated and truthful. The steamer starts on her long voyage and as the coast is skirted all of the familiar sights on land are seen from the deck. Then the nose of the vessel is turned toward the sea and soon she is but a speck on the wide expanse of water. She is next sighted in the high latitude, ice is soon floating by in the shape of hugh ice bergs. The wall of the eternal ice pack is approached and finally the daring adventurers find their ship in the grip of the Ice King.

Now they take sleds and start on the last part of the journey to the Pole which they reach and see the sun from the North peak of the earth. The stars and strips are unfurled, three cheers for Uncls Sam are given and the party starts on its return trip.

The "Battle Abbey" building is a unique institution and will arouse the patriotism of all citizens of this country and win the admiration of foreigners.

It will contain a vast museum of the historical epochs of this country more important than that of the Smithsonian Institute. In other words it will be a

war relic history of the United States beginning with the Indian wars, the French and English war, the Revolutionary war, the war of 1812, Mexican war, the struggle of Texas for her Independence, the Civil war, Custers last fight and that of the conquest of Spain's colonies by this country in the late Spanish-American conflict. These epochs will be illustrated in tableaux. The most important conflicts being seen as follows: The Revolutionary war by the battle of Yorktown, the war of 1812 by the battle of New Orleans, the war of Texas for her Independence by the battle of the Alemo, the Mexican war by the battle of Buena Vista, the Civil war by the battles of Gettysburg a Federal victory and that of Manassas a Confederate success, thus preserving an equipoise of sentiment and the Spanish-American war by Dewey's victory in the bay of Manilla.

In addition Mr. Charles Gunther of Chicago, Ill., has loaned the "Battle Abbey" building his famous war museum formerly exhibited at the Libby Prison which is equal to the world wide famous war museum in Berlin and is of more historical value than the one now in the Smithsonian Institute in Washington.

This vast collection of relics and battle paintings are so arranged that any child will understand and by its aid follow his countrys' fight for greatness down to the present. Mr. Emmett W. McConnell whose fertile brain is the soul of the great combined exhibition in speaking of the "Battle Abbey" buildings in particular said that no expense or pains have been spared in preparing the "Battle Abbey" to be the headquarters of the veterans of any of the wars who visit the Fair and he also makes the promise that everything will be done for their protection and comfort.

Subscribe for the Progressive.

The Progressive Bee-Keeper.

A journal devoted to Bees, Honey and Kindred Industries.

FIFTY CENTS PER YEAR.

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

EDITORIALS AT LONG RANGE. One hundred and three pounds of honey taken from a 60 pound can. Page 394 April 15, Gleanings, G. J. Yodder was made to say. We immediately set to work and in a short time we were successful in cutting 45 2 pound blocks and 18 $\frac{1}{2}$ pound blocks out of a 60 pound can, leaving four pounds of odds and ends. If we can cut 103 pounds of honey out of a 60 pound can by allowing it to candy and then skin the can off and cut up the chunk with a wire it will certainly pay to handle our honey in this way.

I was wondering whether this would escape the eye of Dr. Miller but on page 428, May 1st, Gleanings, he has a straw pointing out the error and the editor offers an apology.

DO BEES DISLIKE DARK COLORS? Some people doubt whether bees disseminate between colors. I do not know how it is with other peoples bees but my bees are nearly always ready to fight a black hat. I have noticed this since I first commenced keeping bees. Usually I wear in the apiary a light straw hat and a veil. This spring I have been wearing a black hat and when working in the honey house I sometimes step out among the bees without first exchanging hats. When I do the black hat is almost sure to provoke an attack from one or more bees that are out hunting trouble.

The editor of Gleanings I think contends that bees are not more likely to attack black than white, or that it is only a notion of some bee keepers that they do so. I would suggest that the best way to prove it is to try it by wearing alternately a black and a light colored hat. Try it when bees are inclined to rob and it will not take so long to decide.

A BEE FEEDER. I think that I have gotten up the handiest and most convenient feeder that can be used. There is no particular invention about this, it is simply an old principle applied to a new use. I will not however describe it here as I have had a dozen or so in use for only a few weeks and wish to see whether they are thoroughly practical before making a big fuss about them, I will probably describe it later.

A NAILING TABLE. I used to get down on the floor when nailing up hives and wear out my knees and back, straddle around like a spider and sometimes entertain some other worldly thoughts, the hammer, the nails, the square and everything needed seemed to have a fashion of getting out of reach just when needed. An ordinary table is too tall and not strong and heavy enough for nailing on; so about two months ago I made what I call a nailing table. This table is made of three inch yellow pine, the top is made of two pieces 3x12 inches by about 3 $\frac{1}{2}$ feet long. The legs are made of the same material of suitable length, and reach clear across near each end. It is well nailed together and thoroughly braced and the top is planed so as to make it as near level as possible. The way I decided on the proper height was by taking a nail in the left hand and holding it against the wall or some upright object at just the right height to receive a downward blow with the

hammer while I was standing in an upright position. The table was then made so that its top would be just sixteen inches lower than this point, as I use ten frame hives. See that the table stands solid on the floor; stand at one corner so that the table is to your right and in front of you. Near the opposite end bore a $\frac{3}{4}$ or 1 inch hole and in this fit a shouldered piece of about 1x3 so that the top of it is 14 $\frac{1}{2}$ inches above the table top. Rest the one end of the side of the hive body on top of this support and fit the other end to the end piece. Now you want a piece of hard seasoned wood 1 $\frac{1}{2}$ x3x10 inches long. Lay this over the dove tailed parts and with a heavy wooden mallet (made for the purpose) and strike a solid blow on top of it driving the dovetails (so called) together. Next put in the other end and last the other side. You have likely noticed that in driving dovetailed hives together when one corner is stuck the other corner has a tendency to come apart. I therefore when I have all four pieces loosely fitted together slide the hard wood piece from one end to the other striking the two upper corners alternately. When the corners are all well fitted together apply the steel square which should be lying on the table near your right hand with the tongue hanging down over the end of the table, after trying it for square you are ready for nailing. The 7d cement coated thin wire nails should be in a pan or some wide receptacle (not in a paper bag) near and convenient to your left hand so that you can grasp six or eight without stooping or moving out of your tracks. Now set a nail near the corner of the hive to your right, start it with one or two light taps and send it home with two heavy blows of a hammer that is just the right weight. Do not peck away on it with eight or ten light strokes. While your right hand is wielding the hammer have your le

hand and fingers bringing the next nail in position. Follow the nails with the hammer, that is work from right to left unless you are left handed, in which case the whole operation should be reversed. The hive stuff and everything needed should be within easy reach so that the operator need not move from his position.

For nailing frames and other small parts I have a seat of suitable height and sit beside the table instead of standing. I have devoted considerable space to this one subject but I fully believe it will be worth much to the readers if they will follow the advice here given.

HIVE NUMBERS. From time to time persons are giving their methods of hive numbers and some go so far as to offer them for sale. What on earth any one wants with a number attached to or written on the hive is more than I can tell. In my apiary the place where the hive is numbered and a plat of the apiary kept in a book or to be more precise it is kept in my head for I know the apiary by heart, to use a common expression, and I also know where and what will be the number of any stands that may be added in the picture. My hives, or more properly their particular locations, are lettered and numbered. They are placed in groups of five, (see A B C of Bee Culture, page 21, edition of 1891.) The groups are lettered from A to Z if necessary, which would run the number to 130, and each group is numbered from one to five. Standing at the southeast corner of the apiary the nearest group is A and the nearest hive is no 1 of that group, hence it is A 1, the next hive west of A 1 in the same group is A 2. Starting at the southeast the numbers run west then north then east and end with A 5 at the northeast corner. Group B is west of group A and is numbered in the same way and so on

throughout the yard. When one row is finished on the west the eastern group on the next row of groups north come next in order. A record is kept in a book of each colony. With this book I could tell as well were I a thousand miles as if standing in the apiary; the condition in which each colony was last examined in most cases I could tell the age of the queen, of what mother she is the daughter, whether she is clipped or has her wings. Whether the colony is weak, medium or strong, though supplied with stores etc. Of course a few exceptions will be found, such as where a queen is superceded during the busy season without my knowledge, but as a rule I know almost the exact condition of any certain colony without opening the hive.

If a colony swarms the swarm is usually hived on the original stand and the old queen remains in her accus-

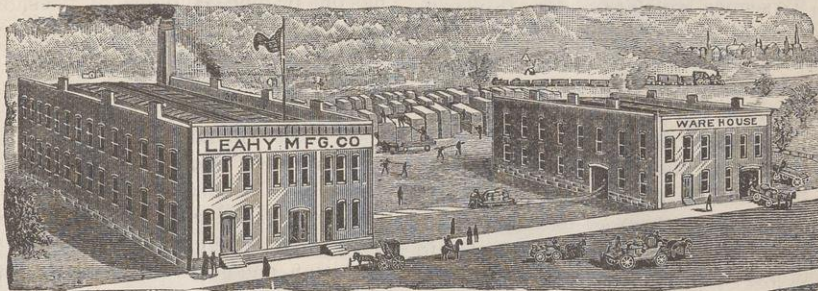
tomed place, and it is not necessary to record a change of her location in the apiary. The parent colony is removed to a different stand and becomes a new or different number and of course will soon have a new or young queen. When there is work to be done in the apiary I look through the record book and on a tablet or sheet of paper make a note of what colonies need attention and what is required. Then I can go to the colonies that need attention and need not as much as look at any others.

THE PROSPECTS. At present, May 7, the prospects for a honey crop are very fair. We are having an abundance of rain and white clover is well set and making a fine growth, as is also sweet and alsike clover. This should be basswood year here but is is not very reliable and therefore I do not count much on it. May 8, saw first white clover bloom of the season.

S. E. MILLER.

PUT ME OFF AT OMAHA

MANY IMPROVEMENTS THIS YEAR.



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

LEAHY MFG. CO.,

Omaha, Neb.

THE ORGANIZATION OF THE PENNSYLVANIA STATE BEE KEEPERS ASSOCIATION.

Pursuant to a call for a convention of the Bee-Keepers in Pennsylvania a number of persons met at Williamsport on April 12, and organized the Pennsylvania State Bee-Keepers' Association with the following officers: President, Prof. H. A. Surface, State College; 1st Vice President, E. E. Pressler, Williamsport; 2nd Vice President, W. A. Selser, Philadelphia; 3rd Vice President, J. N. Prothero, DuBois; Secretary, D. L. Woods, Muncy; Treasurer, E. L. Pratt, Swathmore; Executive Committee, Richard D. Barclay, State College; Charles N. Green, Troy; Prof. E. N. Phillips, University of Pennsylvania, Philadelphia; A. E. Dempwolf, York, and John D. Costello Harrison Valley.

The chief purpose of this organization is to promote Apiculture in Pennsylvania and it is to be accomplished by efforts made along the following lines: (1) To secure legislation for the promotion of bee-keeping. (2) To suppress the diseases of bees, especially foul brood, by legislation and by the appointment of a competent state inspector with deputies or assistants. (3) To secure and promote instructions in bee-keeping at Farmers' Institute (4) To secure a series of lectures at the normal session of Farmers' Institute Lecturers to be held in Bellefonte next October. (5) To make it possible for persons to obtain instruction in apiculture at the Pennsylvania State College. (6) To induce and promote investigation and experimentation in apiculture at the Pennsylvania State Agricultural Experiment Station. (7) To induce and promote investigations and publications by the Division of Zoology of the Pennsylvania State Department of agriculture. (8) To enforce the laws against the adulteration of honey. (9)

To secure laws against spraying fruit trees while in bloom. (10) To obtain statistics concerning bees and bee-products within our state. (11) To enter upon a crusade of apicultural education in this state, both for producers and consumers of honey. (12) To instruct fruit growers and farmers as to the practical value of bees as fertilizing agents for their plants, and to show the fact that they are wholly beneficial and never injurious. (13) To raise the rank of Pennsylvania as a honey producing state from fourth in the Union to first, if possible. (14) To band together all the bee-keepers of the state for the purpose of good fellowship and that strength, which is to be obtained only by union. (15) To make it possible for all persons who are not now keeping bees to add to their revenues by the production of honey, and to increase both the quantity and quality of the honey produced in this state.

The association desires the name and address of every man in the state who has one or more colonies of bees, and for this purpose invites persons to correspond either with the president or the secretary, stating the number of colonies or hives kept, and giving statistics as to the amount of honey and wax produced each year. The membership fee is only \$1.00 per year which also entitles the individual to membership in the National Bee Keepers' Association, and gives him special protection and assistance at any time that it may be required. For example if a member of the National Association becomes involved in litigation the National Association will furnish expert testimony and counsel such as may be necessary to secure equity in the courts of justice.

The commendable undertaking should receive a large membership, and all persons interested are invited to send their names, addresses and fees to the

secretary, and these will be registered and accepted.

The next meeting will be held in Harrisburg during the first week of December when several papers will be presented by practical and expert men bearing upon the various problems of the bee culturists in our state. Correspondence is earnestly solicited.

H. A. SURFACE, President,
D. L. WOODS, Sec. Harrisburg, Pa.
Muncy, Pa.

THE 'ONLY WAY' ALL THE WAY

The Chicago & Alton is soon to have a new short line between St. Louis and Kansas City. The new "cut off" is to be opened in June. Then the distance, St. Louis to Kansas City, will be only 279 miles.

The new 65-mile cut off which shortens the St. Louis-Kansas City Line is level and straight, the maximum grade being only twenty-six feet to the mile—half of one per cent.; the maximum curvature is only one per cent., the road is properly called an "air line"—ninety-two per cent being perfectly straight track. There is one tangent of eighteen miles and another of fourteen miles, but these tangents could properly be called a straight track for thirty two miles. The bridges are of steel, the culverts are of concrete, and the road,

which is magnificently built, is ballast with rock. The tracks are eighty-five pound steel rails one hundred and thirty-three feet long. There are thirteen passing tracks of three thousand feet each—over seven miles of passing tracks, which, owing to their great length, might be called double track.

There are no grade crossings for railroads and very few grade crossings for country roads. Four daily trains in each direction will be operated, and the time-tables and equipment will equal in every way The Chicago & Alton's noted Chicago-St. Louis service.

The opening of The Chicago & Alton's new line between St. Louis and Kansas City fittingly and permanently commemorates the Louisiana Purchase Exposition. In time of completion, and also in other ways the Alton's new line is typical of the Fair. The St. Louis Exposition will show the highest examples of every product of all kinds in the world, as will the Chicago & Alton new line show the highest standard to which the world's railways can be brought. As the World's Fair will illustrate the processes which make American goods preferred in the markets of the world, so the Chicago & Alton will illustrate in all details—construction, equipment and operation—the accepted standards, which serve as models for the world's common carriers.

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Mention this paper.

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DEP'T 1122.

My Wood Nymph.

By D. L. TRACY.

Continued from last Issue.

"Judge," he said in solemn tones, "I must tell you there is no hope Your daughter, while in a greatly excited state has broken a blood vessel and she has only a few more hours to live."

"Oh Doctor, my child, the only one I have to live for," cried the Judge in anguish. "It cannot be."

"Come," said the Doctor, "Let us go to her, she is anxious to talk to you and Fannie."

They entered the sick room, and found Fannie sitting beside the stricken girl, holding her hand.

At the sight of his daughter's pale face, the Judge's grief burst forth, and sinking on his knees at the bedside, he cried:

"My child, Oh my child, now I know and feel the anguish David felt at the loss of his son. Oh Julia, all my life is centered in you."

"Father, do not grieve for me, it is best that I should go. Fannie, it is kind of you to come to me, when I was so cruel to you the other day. Was it only the other day? It seems as though a year had passed since then, and that I am just waking up from a morbid life. Oh, Fannie, will you forgive me?" and Julia held out her hand to Fannie.

"Julia, I have nothing to forgive," said Fannie, while her tears fell fast.

"Nothing to forgive, when I was trying to wreck your life's happiness."

"There, Julia, do not talk so."

"Fanny, I must talk. Have you heard from him?"

"No, Julia."

"When he comes, tell him all that I did and then ask him to forgive me. Will you?"

"Yes, Julia, I will."

"Kiss me, Fannie, and pray to God that He will let me live until I see Tom."

"Oh my dear child, must you go? Will God take you and leave me alone?"

"It is better so, father. But you will not be alone, you will still have Tom."

"Though Tom is very dear to me" said the Judge, "and will be a comfort to me, still I want my little girl."

"If I go before he comes, father, tell him what I would have told him, and do everything that I wished to have done. Will you, father?"

"Yes, yes, Julia, I will do everything you wish. But do not talk so, else my heart will break."

"Oh, father, I grieve for all the sorrow I have caused. Sorrow to you, to Tom and to Fannie. I defied honor, honesty and love, in my arrogant willfulness, and it is only right that I should be taken away."

"Oh, Julia, do not say that."

"Fannie, when Tom comes, if I am here, bring him to me at once, will you?"

"Yes, dear," said Fannie.

"And Fannie, will you stay with me, until the end?"

"Oh, do not talk so, Julia, you will get better, then we will all be happy."

"No, Fannie, I will never get better, and even if I should, what have I ever

done to deserve any happiness? But you will stay with me?"

"Yes, dear, yes."

So Fanny remained by the bedside of the girl, who had caused her so much sorrow. But as she looked into the pale face of the patient, and realized that the sands of life were ebbing away, she forgave her, and did everything in her power to render her last moments more comfortable.

It was almost midnight, of the second day of their watching, when a tremor passed over the almost unconscious form of the patient, she opened her eyes, and said:

"Tom is coming, I hear his step, he has come in time."

She pointed toward the door, and there stood the pale, emaciated form of Thomas Tupper. So weak was he, that he leaned against the door, for a support.

"Oh, Thomas," gasped Fannie springing to her feet.

"Tom, Tom, my boy," said the Judge.

Slowly Tom advanced toward them, taking the outstretched hand of Fannie he said.

"Oh my love."

He bowed to the old Judge, then turned and gazed at the form which lay stretched upon the bed.

Poor Tom was but a wreck of his former robust self, so waisted was he by the fever, and fatigued by the strain of the long journey, which he had made in order to reach home in time. He arrived just in time to take up the notes of himself and Mrs. Long, so the dreaded mortgage was cancelled.

Learning that Fannie had accompanied Judge Jones home, he hurried after her as fast as he could, but was shocked at the pallid appearance of Julia, as he had not learned of her serious condition.

He now stepped hastily to her side saying:

"Julia, Julia?"

"Tom, dear Tom, you are here, and in time. I am so glad. I - - c a n - - t e l l - - y o u - - g o o d - b y e ."

"Tell me good-bye, Julia?"

"Yes, Tom, God - - h a s - - c a l l e d - - m e ."

"Oh, Julia, do not say that," said Tom.

"Yes, Tom, - - I - - s h a l l - - s o o n - - r e s t - - u p o n - - t h e - - o t h e r - - s h o r e . B u t , - - T o m - - b e f o r e - - I - - g o - - s a y - - y o u - - f o r g i v e - - m e ."

"Julia, I forgive you freely."

"Tom - - y o u - - w i l l - - b e - - h a p p y - - w i t h - - F a n n y . S h e - - w i l l - - t e l l - - y o u - - a l l - - s o m e d a y ."

"Julia, do not talk when it affects you so."

I - - m u s t - - T o m . Y o u - - w i l l - - t a k e - - m y - - g i f t - - f a t h e r - - w i l l - - t e l l - - y o u . K i s s - - m e - - T o m ."

For a moment his lips met hers, then her head dropped back, and she was at rest.

"Oh, my God," cried the old Judge, "My child is dead." And the gray head of the father was bowed over the lifeless body of his daughter.

Raising his head after a time, and catching sight of Tom's emaciated form, he went to him, and placing his hand on his shoulder, said:

"Tom, my boy, you have been sick, you have suffered?"

"Yes, sir," said Tom.

"I am sorry, for it was through her I loved so well, that this sorrow has fallen upon you."

"Oh Judge," cried Tom, "Let us not speak of this."

"It is true, Tom, yet she was my child and I loved her. She was sorry of having treated you so harshly, and wished you to accept a gift from her."

"A gift from her?"

"Yes, Tom, and here by her dead body let me offer it to you. She wished to give you the home where lives the

girl you love. Will you accept her gift?"

"Julia wished to give me Fannie's home? It is impossible."

"Why is it impossible, Tom? It was her last wish."

"It is impossible, for the reason that this afternoon I paid off the notes which Mrs Long owed on the place, and it is ours."

"How did you manage to do this?"

"With the money which was made in our little apiary, through the joint efforts of Fannie and myself."

"Then the last wish of my child cannot be gratified?"

"No it cannot."

"Then Tom, be a son to me. We have both suffered, but here by the couch of my dear dead daughter, let us forget, and as the years roll away, be they many or few, let us think that "God doeth all things well."

"Amen," said Tom.

The mortal remains of Julia Jones were laid away in a quiet spot, and a beautiful marble slab marks her last resting place.

Three months after this sad event, Tom and Fannie were quietly married, in the little home they had struggled so hard to keep. The only ones present being the minister, Judge Jones and Mrs. Long.

The bride wore a beautiful diamond brooch, which was presented to her by the Judge. When he gave it to her, he said:

"Fannie, you must always be a daughter to me."

And Fannie had said she and Tom would be his children, and comfort him in his loneliness. The Judge kissed her, and said, "God bless you dear," and led her in to Tom.

After the gay little supper, which followed the ceremony, was over, Tom and Fannie slipped out into the garden. It was a beautiful night, the moon

shone bright, and lit up every nook and corner of the garden.

Tom put both arms around his wife, and drew her to him in a tender embrace.

"Fanny, dear, are you happy now?"

"Yes, dear, very happy."

"Fannie, I can almost see the place by the old log where I first saw my wood nymph. I can see you as you looked that day. Your eyes were full of tears, and I longed to take you in my arms and kiss them away."

"Oh Tommy."

"Tommy, how sweet that sounds, Fannie, almost as sweet as honey."

"Dear Tom, what did Judge Jones say to you?"

"He said that as I was his adopted son, he would take the liberty of advising me, as to my future course in life, and would advise me to fit myself for some professorship. And he also said the money would be forthcoming, to accomplish this, any time I would accept it."

"How kind of him. He is just like a father to us, Tom."

"Yes, Fannie, and we must cherish him like a father, for he is very lonely, since his daughter's death."

"Oh Tom, my heart bleeds when I think of that poor girl."

"My love, have you no bitterness in your heart for her?"

"No, why should I?"

"Why should you? darling I should not asked that question, for there is no bitterness about you. You are my sweet, my love, my honey."

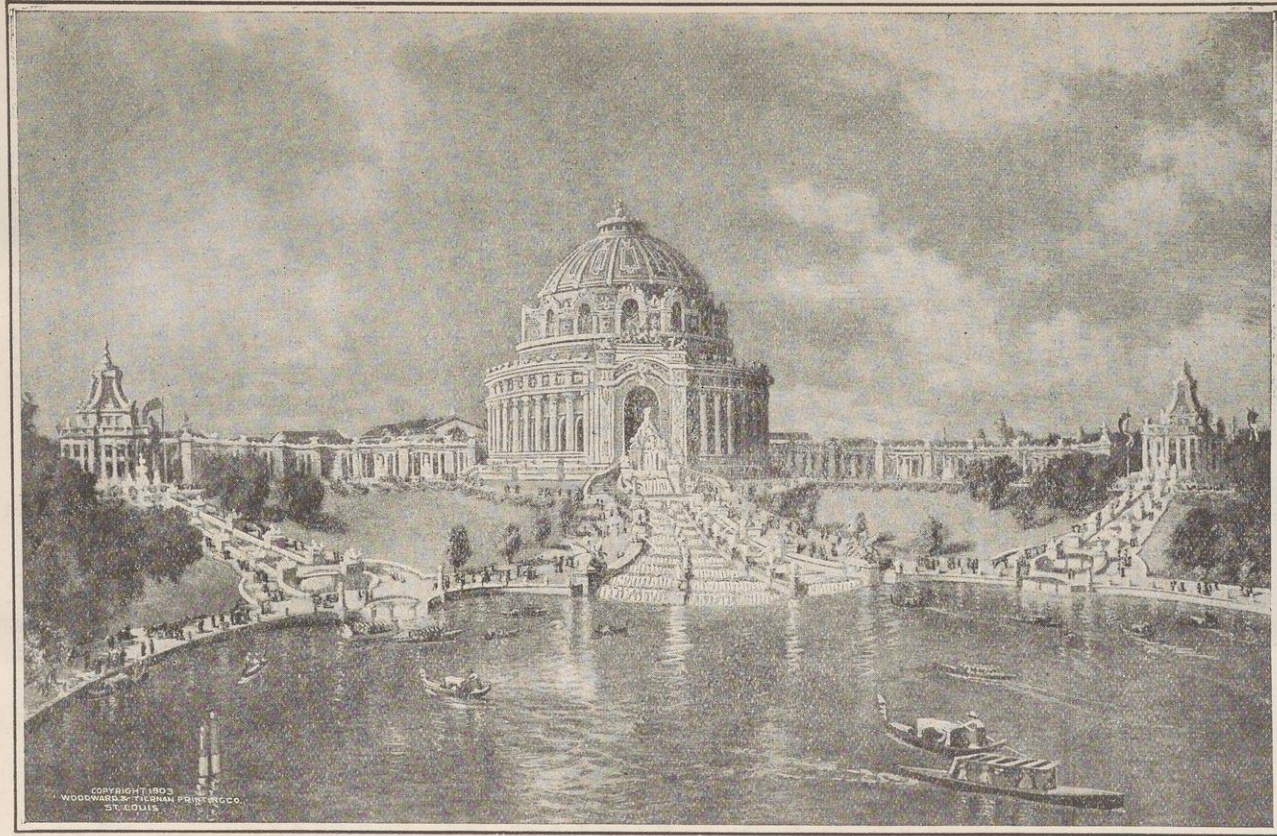
"What shall I call you, Thomas?"

"My wood nymph, call me the nearest thing you can to honey."

"Then Tom, I will call you my dear bees-wax."

[The end.]

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ST. LOUIS

Educational Exhibits at World's Fair.

The greatest exhibit of educational work is now open at St. Louis. The exhibits are far from complete but they will be in fine form by June 15. Every Missouri teacher should plan to see it soon thereafter, for later it will be worn.

The Missouri exhibit will easily take the lead in its general features of which the following are some of its most conspicuous ones:

Its "live exhibit" of actual school work given by teacher and pupils every afternoon from 3 to five will attract universal attention.

Its moving pictures represent all sorts of school room activities and athletic games and will interest everybody.

The photographic representations of actual school room conversations and recitations will indicate very distinctly the teaching process as they really are.

The illuminated pictures will show the gradual development of education in the history of the nations as well as in our own state and cities.

The unique illustrations of statistics will show at a glance the rapid growth of school interests and efficiency.

The especially fine display of geography work from Kansas City should be studied very carefully. One who has examined all of the geography now on exhibit says that this is easily first.

Springfield has some very fine work in physiology. It is not believed that better drawings and composition work in this subject will be found anywhere.

Very attractive features will be the hand work of many different kinds from the Normals, Kansas City Manual Training, Lincoln Institute and various other schools of the state.

The University Campus is exhibited by means of a large relief map and by painted pictures showing the grounds and buildings in its six stages of growth beginning in 1843.

Missouri has extraordinary exhibits, but one who is looking for some things will be disappointed, but not because they are impossibilities.

Both Iowa and Minnesota have very unique and complete exhibits of rural school work. They are very near Missouri both on the map of the U. S. and in the Palace of Education. Every rural teacher should examine them carefully.

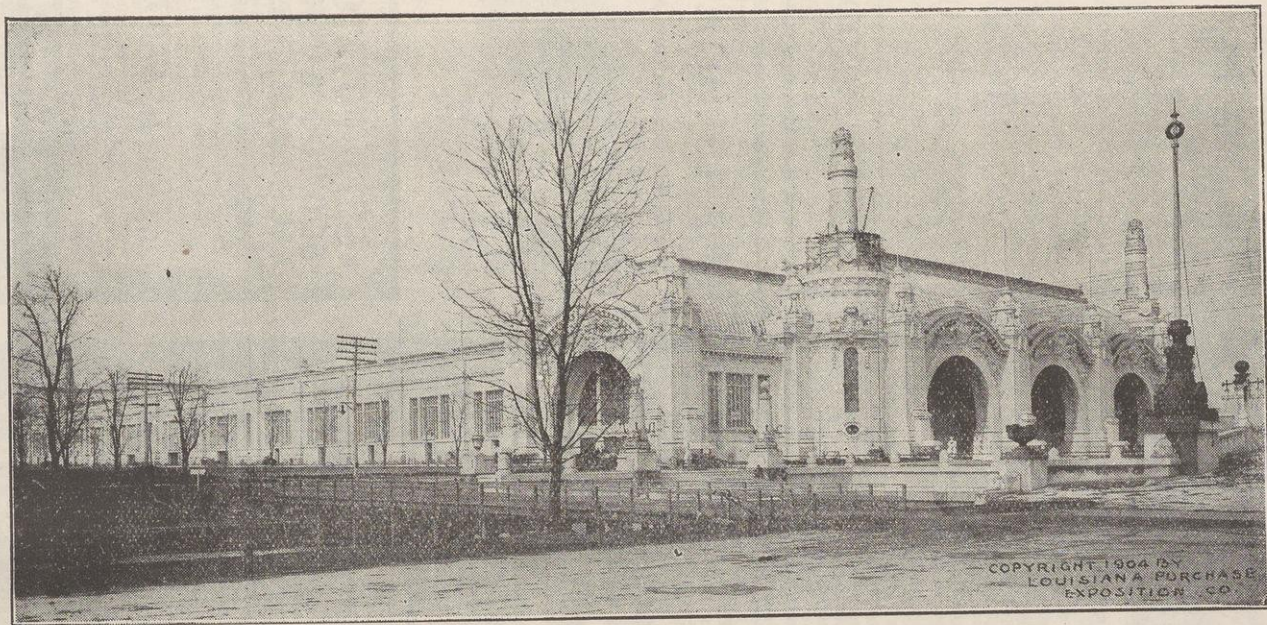
Illinois is very incomplete but will be ready by June 15th. One feature of special importance is the complete exhibit from one county showing work in every rural school of the county, including school gardening and the teaching of agriculture. In this exhibit is a model of a one room rural school house and the reproduction by actual measurements in miniature of a consolidated rural school house.

The exhibits of the State of New York are second only to Missouri's in general attractiveness. In magnificent models of several of its best school buildings, in multiplicity of things told by its best graphic presentation of statistics, in attention given to evening schools, to vacation schools and to school extension work, New York will have no competitor.

Massachusetts maintains its reputation for solid merit in so many excellent features. The work of its different Normal Schools is so displayed as to indicate the stress that state puts on trained teachers. Go there to study methods in Nature study, methods of correlating industrial arts with regular school work, for preparing special teachers in any and all lines of public school work.

Missouri teachers can purchase ten World's Fair coupon tickets and a National Educational Association membership for the price of the tickets. They may be used as early as June 17th, good until ten days after June 28, the last day they will be on sale. This membership will admit to the one and all of the more than one hundred meetings of the different departments held on the grounds between June 28 and July 6, and of the state as a whole and of every teacher to attend at that time and enroll. Plan to spend ten days there, it cannot be seen in less time.

W. T. CARRINGTON,
State Supt. Public Schools.



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Salzer's Beardless Barley, 121 bu. per A.
Salzer's Homebuilder Corn, 304 bu. per A.
Salzer's Big Four Oats, 250 bu. per A.
Salzer's New National Oats, 310 bu. per A.
Salzer's Potatoes, 736 bu. per A.
Salzer's Onions, 1,000 bu. per A.

All of our Farm and Vegetable Seeds are pedigree stock, bred right up to big yields.

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Greatest cereal wonder of the age. It is not corn nor wheat, nor rye, nor barley, nor oats, but a golden combination of them all, yielding 80 bu. of grain and 4 tons of rich straw hay per acre. Greatest stock food on earth. Does well everywhere.

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Salzer's Teosinte produces 113 rich, juicy, sweet, leafy stocks from one kernel of seed, 14 feet high in 90 days; yielding fully 80 tons of green fodder per acre, doing well everywhere, East, West, South or North.

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For 10c in Stamps

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Largest seed potato growers in the world!

Elegant stock. Tremendous yields.
From 400 to 1000 bushels per acre.

FOR 10 CENTS

and this notice we send you lots of farm seed samples and big catalogue, telling all about Teosinte, Speltz, Peaoat, Aerid Land Barley, Macaroni Wheat, Bromus, Earliest Cane, etc. Send for same today.

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Those parched, dry, arid plains of Mont., Colo., Ariz., Idaho and other dry lands respond quickly and give a big yield when planted to Salzer's Speltz, Hanna Barley, Marconi Wheat, 60 Day Earliest Oats, Billion Dollar Grass and Bromus Inermis. Above seem to flourish and laugh at droughts and arid soils.

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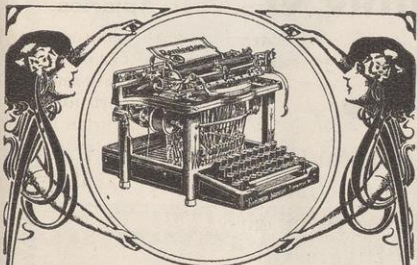
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AND OTHER BITS OF VERSE

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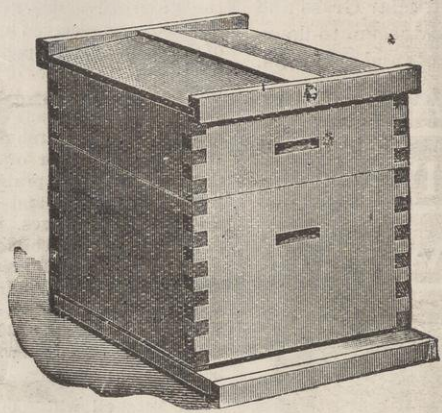
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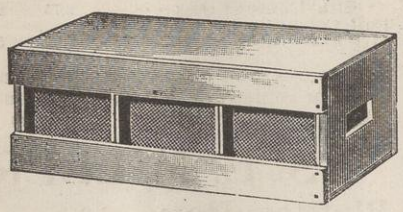
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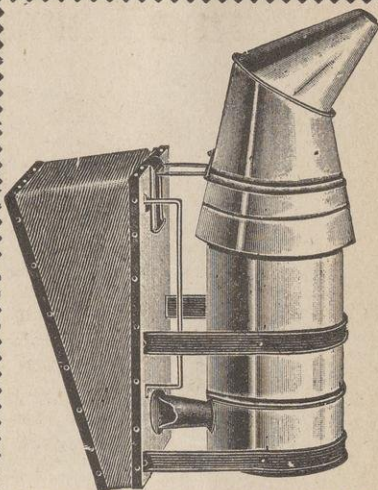
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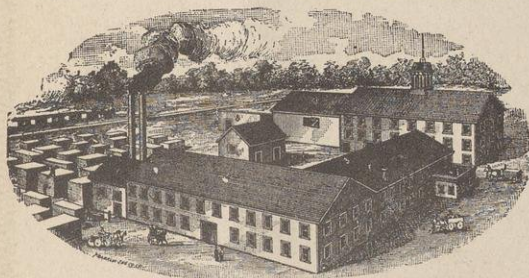
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A Good Smoker for a Little Money.
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"The 'Higginsville' Smoker is a Dandy
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Carry the largest stock and
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I have used Bingham Smokers ever since they first came out. Working from three to seven hundred colonies twelve months in the year. I ought to know what is required of a smoker. The Doctor 3 1/2 inch just received fills the bill.

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 Respectfully, WM. BAMBU.



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