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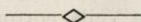
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AUGUST, 1898.

THE BUSY BEE

A Monthly Journal Devoted to
FARM BEEKEEPING,

And the Other Minor Interests of Modern and Progressive Agriculture.



PUBLISHED THE FIFTEENTH OF EACH MONTH BY
EMERSON TAYLOR ABBOTT,
ST. JOSEPH, MISSOURI.

ANNUAL MEETING

—OF—

THE UNITED STATES

BEEKEEPERS' UNION

—AT—

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September 13th to 15th.

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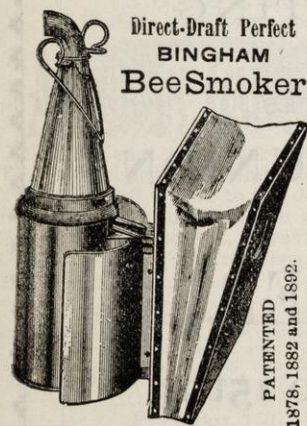
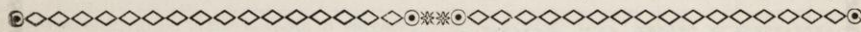
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CHAS. DADANT & SON,

Please mention The Busy Bee.

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W. H. EAGERTY.

Corning, Cal., July 14th, 1895.
I have used Bingham Smokers ever since they came out. Working from three to seven hundred colonies twelve months in the year. I ought to know what is required in a smoker. The Doctor 3½ inch just received fills the bill. Respectfully,

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Please mention The Busy Bee.

T. F. BINGHAM, Farwell, Mich.

THE BUSY BEE.

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AUGUST, 1898.

No. 8.

FARM BEEKEEPING.

Robbing.

By C. P. DADANT.

THE honey bee has many a good quality, and her morals are, in some respects, of the very best. With her, laziness is unknown; as soon as she is born she busies herself with the domestic cares of the hive, and just as soon as she has gained sufficient strength she sallies out to gather the products of the blossom to help sustain the family. Frugality is her motto, and she never consumes more than she absolutely needs, but faithfully brings home the surplus gathered. She is devoted to her mother and to her kin, and will as readily die in defense of her home as the most gallant of our soldiers will give his life for "Old Glory." She is true till death, for she really gives her queen-mother the last drop of honey to be had and will devotedly cover her with her body to keep her warm to the last minute. When her days are ended, she does not care to give any one the trouble of watching over her, but bravely rushes out to die in the last ditch.

But with all these wonderful and modest qualities, which she does not parade over the world, as men do, the bee has her faults too. For if she has worked laboriously to help secure a surplus and provide for winter, she becomes, by the very nature of her disposition, a rapacious and unreasonable beast when tempted with forbid-

den spoils. When the flow of honey from the blossom has stopped, if for any cause honey has been exposed in her reach, and not only honey, but any kind of sweet, the virtuous little bee at once becomes possessed with a spirit of greed, which can only be compared to the mad thirst for gold shown by human beings. Like the fortune-hunter, she will brave anything to get to the desired fortune, and will sooner perish than give up the undertaking.

The greatest danger of what we call "robbing" is during the dearth of honey, between the clover, or early crop of honey or the fall or late crop. The period of shortage is of more or less duration, according to the season, but does not usually last much over a month to six weeks. When the hives are to be opened, or the honey is removed at such times, it is necessary to exercise a great deal of judgment. The hive must be opened with promptness and must be closed quickly. No honey should be left exposed to the reach of the bees. With these precautions nothing need be feared. The robber bees are readily detected, by their sneaking, nervous, guilty-looking actions. They fly here and there, with a sharp, peculiar hum, like that of an angry bee; but with the difference that they evade attack instead of boldly making a front against the apiarist. When they are not numerous they are not to be feared, but if one or two of them get a taste of hid-

den treasures they will soon come back with a dozen of their sisters who, in turn, bring hundreds, and if no defense is made they very quickly appropriate anything that is considered by them as fit to be eaten.

Any bee may become a robber, if tempted, in a time of scarcity, with easily reached sweets. In fact, their nature, which teaches them to hunt for flowers, in the meadows or in the thickets, readily shows them the way to any gathered sweet, whether or not in the possession of other bees. Especially weak colonies are in some danger of their depredation, if they have once been lured to the dangerous and seemingly fascinating pursuit of appropriating what belongs to others.

It is not honey alone which attracts them, but all sorts of sweets. The wine maker, the cider maker and the molasses manufacturer are often annoyed by them. Any sweet smell attracts them, but they do not really become frantic until they have tasted of the forbidden sweet. If a hive is left open for a considerable length of time, and honey is exposed to the reach of robbers, they will soon come in swarms, and they become so bold that some of the strongest colonies thus exposed have been known to have been forcibly overcome by the rush of their enemies and their stores entirely carried away. It is much easier to prevent robbing than to cure it after it has begun, and for this reason we would warn the bee-keeper most emphatically against allowing anything to take place that may induce it in his apiary. When honey must be removed it is well to cover it at once with a loose cloth, what bee men call a rubber cloth, while handling the comb, or the sections, in the open air. This cloth prevents the smell of the honey from spreading and attracting the bees of other hives. If any honey is spilled, by breaking a comb or by some acci-

dent, we always aim to cover it up with loose dirt at once, for it is better to lose a little than to give the bees any bad habits. For the same reason feeding should never be done in the open air; even if there was no danger of feeding other bees than those intended to be fed; but it should be attended to when necessary, in the evening, and the feed should be given in the hives, at all times, and at the top of the combs rather than at the bottom. When bees have been given an opportunity to rob they become so frenzied that they act much like insane people; like the mad gold seekers rushing to the Klondike, in spite of the prospect of freezing and starving, they go on without heed of anything.

By accident, we once had a barrel containing some fifty pounds of honey to remain open, where bees could get at it, during a dearth of honey. Bees were soon attracted to it, and although all that alighted in the honey were immediately engulfed in the sticky mire, more bees kept on coming until the honey was sufficiently thickened by the dead bodies floating in it to allow the still coming legions to safely land upon the dead bodies to gather the plunder.

Hamilton, Ill.

Robbing.

The most perplexing thing the bee-keeper experiences is robbing. At the close of the honey season there is always more or less of it. As a rule, colonies that are strong and in good condition generally do not allow robber bees to do them any injury; but, on the other hand, all colonies that are not in proper condition will sooner or later fall victims to the robber bees.

Almost any colony of bees may be induced to turn out robbers, as it is not beneath their modesty at all, but

some colonies are much worse than others to pilfer and steal and turn to their account that which does not belong to them. While bees seem to be neighborly and may sit close to each other in hives on the same stand and never quarrel, yet they seem to deal with each other as strictly enemies, and at no time are they restricted from carrying off the property of another.

The bee-keeper need not have much trouble in this line if he is careful. Robbing in most cases may be traced to neglect on his part—of leaving honey exposed so the bees get access to it, and when they once thus get a taste of honey they will make a very diligent search for more, and every hive will be tried. Colonies that have no queen, as a rule, will not defend their hive and stores, and this causes more robbing than all other things combined. The oldest bees of the hive perform the duty of guarding the hive, and when all the bees of the hive are young, as in case of moving a stand of bees to another location and the old bees returning to their former stand, places such a colony at the mercy of the robbers. Hence this should not be done after the close of the honey season, except they are closely watched in this particular.

In nineteen cases out of twenty robbing is caused by mismanagement on the part of the bee-keeper, and is done by allowing colonies to remain queenless, or by thus depriving them of the guard bees by moving them from their location to a different one in the same vicinity. Bees do not always select the nearest hives to them to rob, but may go miles away to a neighboring apiary and do their nefarious work.

How to tell when bees are robbing or are being robbed is something that requires a little experience, at least to detect it at once. If there are many colonies present, and an unusual num-

ber of bees are seen flying about one colony and not another, it is some indication. But to look closely we can see the bees coming out of the hive full of honey and the lank, hungry-looking ones going in, which is always the reverse in colonies working. The only time this is imitated is in the case of young bees taking a first flight, when they, at or about 2 o'clock during the afternoon, come out thus almost in a body; but it is easy to distinguish these young, bright-colored bees from robbers.

The first thing to look after in case of robbing is the condition of the colony being robbed. But this cannot safely be done just at the time of discovery, for to now open the hive would expose them more than ever to the enemy, so to completely check it just throw a large blanket over the hive. This will end it at once and will remain so long as the blanket is there. Frequently raise one corner of the blanket to let out the robbers and let in the occupants of the hive, if any may be out. And right here let me say, that you can at any time of day bring all the bees of the colony home in a half hour's time by thus blanketting the hive. The hive being covered and darkened, no more bees will go out of it, and those coming home will go in when you raise the corner of the blanket, and then let it drop back again when those outside go in, and thus keep letting them in as fast as they gather about the hive. In the honey season there are perhaps one-third of the colony in the fields during the day, but none will be longer gone from the hive than half an hour, and the larger portion much less.

In exceptional cases, a colony seemingly in perfect condition will allow themselves to be robbed. They appear to be so dilatory as to allow robbers to pass their guards seemingly unnoticed. This is a case to worry the apiarist

most. I have made them fighting mad by killing a few bees on the entrance, and they would boil out of the hive and sting me, but, all the same, the robber bees could pass in, load up with their honey and carry it off. With all other cases, by giving a frame of brood or a queen to those out of condition would put the proper spirit of protection in them, but with the latter class there seems to be no redemption, and I have in such cases changed places with some other hive, and if the hive that was doing the robbing was discovered, I used to make the change, with good effect.—*Kansas Farmer.*

Keep the Colonies Strong and Prevent Robbing.

The possibility is that if the bees were allowed to swarm at their own will, there are a number of weak colonies and possibly some which are queenless. These weak colonies are a nuisance in general in the apiary, as they cannot gather enough food for themselves, let alone store a surplus, and if fed enough for the winter they often dwindle away so that by spring a mere handful remains or none at all. The only way to utilize them profitably is to unite them until we have strong colonies.

Those colonies that lost their queens while in the swarming excitement, must now be looked after or they will make trouble. After being queenless for some time they become discouraged and will not properly defend their hives, so that very often robbing will be started and sometimes the melee will continue until all the weak colonies are done up and there is meanwhile a reign of terror in the neighborhood of the apiary. The bees seem to "run amuck" and sting man or beast wherever they meet them. Guard against robbing on a large scale in the apiary if possible. As soon as

you notice a colony is being attacked, cover hive and all with a sheet and allow the cover to remain on until you can attend to it. If the colony is in a normal condition and fairly strong, the best plan is to shade the hive well—contract the entrance so only one bee can pass at a time, and set up a pane of glass before the entrance, leaning the top up against the hive. The bees in the hive will soon know all about the glass, while the robbers will be confused and bump up against it and give up in despair. Leave no honey exposed anywhere so the bees can get a taste, as that will cause them to pry into hives or cracks and start them.

If robbers are about when you wish to remove surplus honey, use plenty of smoke and do it as expeditiously as possible and cover the hive. The removing of sections from the super and assorting them can be done in some building. If you wish to extract honey while robbers are troublesome, you must work in a bee-proof house and take the combs and replace them with empty ones quickly and with plenty of smoke—though don't smoke the colony too hard that you are manipulating.

L. W. LIGHTY,
in *American Gardening.*

The Sting of the Bee.

The chemical and toxic properties of the poison of the honey bee have been a subject for long study by a German scientist, Dr. Joseph Zanger. During his investigation Dr. Zanger employed 25,000 bees. He found that the fresh poison is clear, like water, of an acid reaction, bitter taste, and of a fine aromatic odor. On evaporating and drying at a temperature of 100 degrees centigrade (212 degrees Fahrenheit), a gummy residue is left. It is soluble in water; with alcohol it forms an emulsion-like mixture. The aromatic odor is due to a volatile sub-

stance which disappears on evaporation, and is not poisonous. The poisonous constituent is not destroyed by short boiling, nor by drying and heating the residue to 212 degrees Fahrenheit, nor by the diluted acids or alkalis. Dr. Zanger has proved the existence of formic acid, but he has also proved that that is not the poisonous principle. The latter is an organic base, soluble, with difficulty in water, but kept in solution by an acid. On the healthy skin neither the bee poison nor a 2 per cent solution of the poisonous principle has any effect, but they act as powerful irritants on the mucous membranes. His test made on rabbits and other animals show that when the poison is brought in contact with the eye there follows lachrymation, hyperemia, chemosis and croupous membrane or conjunctiva. The general condition is also affected; the animals become melancholy, take no food, but are very thirsty, and the urine shows small amounts of albumen.—*Farmers' Voice.*

Bees and Honey at the Trans-Mississippi Exposition.

On the west side of the north avenue of the Exposition grounds there will be seen a beautiful building in Swiss architecture, devoted entirely to the bee and honey industry. The department, the exhibits of which are placed in this building, is in charge of Mr. E. Whitcomb, Friend, Neb., an experienced and enterprising bee keeper, who takes pleasure in showing visitors through the building. Arranged along the two sides are long glass cases six feet high, in which the bee keepers of the West have placed their exhibits in most attractive and interesting style. Through the center of the hall are large booths and cases devoted to individual exhibits of supplies and other paraphernalia of the bee keeping art,

which makes a showing scarcely excelled by any other single industry on the Exposition grounds. At the left, as we enter, a section of the case is set apart for Douglas county, Nebraska, the county in which Omaha is located, and which contains some of the most enthusiastic bee keepers in the West. In this section may be seen honey, both comb and extracted, prepared in all manner of attractive ways for the market. The light and dark colors are intermingled so as to make a very attractive color show, and on top of the case the words "Douglas County" are made in letters almost three feet in depth, each letter being composed of half pound jars of extracted honey as prepared for the market, the colors blending so as to make a very ornamental sign. Among the products seen here, in addition to honey, are vinegar made from honey, Metheglin or honey wine, and wax in various forms. In another part of the room Douglas county has an ornamental case of honey producing plants found in the county. Some of these plants are arranged in a most attractive form. For example, an outline picture of the battleship "Maine" is constructed of the yellow bloom of the sweet clover. Other designs of striking and attractive appearance are also made, the material in every case being pressed plants and flowers, prepared as for botanical collections. Primitive bee keeping is also shown here in a bee tree cut from the woods, and in the Dutch straw hive still in use among some of the Germans near this city.

When we reach the Nebraska state exhibit, which fills the remainder of the large case in the south side of the hall, we find a very large collection of honey and other products arranged in most attractive form, having in mind not only the making of an attractive exhibit, but also the educational side of bee keeping. The extracted honey

in this exhibit is shown to advantage in quarter pound, half pound and pound jars; arranged in pyramid form, each pyramid labeled so as to show the plant from which the honey is made, the color enabling the visitor to detect, after a very short observation, the plant from which the honey is made, and making him an expert judge in the buying of honey.

The exhibit of vinegar made from honey, in the Nebraska state exhibit, shows every color known to the trade from water-white to the dark red of cider vinegar, and it is found to be an excellent article of vinegar on sampling.

The exhibits of beeswax are among the most attractive in the entire bee and honey building. Every shade of color is shown, from snow-white to dark brown. The darkest brown, perhaps, are samples from Spain, to be seen in a case of samples of wax from all states and nations. Visitors will no doubt be surprised that beeswax should be an attractive Exposition exhibit, yet we think a very agreeable surprise awaits those who will visit the bee and honey building. We see here the ornamental uses to which beeswax may be applied in very many ways. For instance, here is a case of wax flowers made by Mrs. Segear, a lady seventy-five years of age. There are three designs in this exhibit, one a cross entwined with a spray of ivy, with bouquets of roses clustering around the base. Another is a cross, roses in white, red and yellow. Another consists of a large cross with fuschias, and around its base white and yellow roses, altogether making a most beautiful design. Mrs. E. Whitcomb of Friend, Neb., shows also a great many exquisite designs in wax flowers. In one place we observe a three-sided pyramid, on one side of which is a floral design called "Gates Ajar;" on the other side a floral lyre and wreath. In

another place we see a white dove, beautifully modeled in wax, and surrounded by a wreath of flowers, and in another place, pond lilies. In another place we find designs of anchors, harps, crosses, etc., the floral decorations being roses, honeysuckles and other common flowers and vines, all beautifully done. The sculptor's hand has also been at work in beeswax. We find here sculptured elephants, ears of corn, pig, boy, squirrels, dogs, angels, and other forms of most interesting character.

Samples of cookery are also shown, in which honey is made to take the place of other sweetening. Fruit cake, ginger bread and other luxuries make quite an attractive appearance. Honey sugar is also shown, and a honey thermometer, no doubt representing the rising temperature among the bee keepers in Nebraska.

Some eccentric decorations are shown with good effect, as in one case the word "Nebraska" is spelled out in capital letters occupying a one-pound section of comb honey, the letters having the appearance of being made by the bees and filled with honey.

In a gallery, a very interesting exhibit of live bees may be seen at work. These are shown in observation hives, the sides of which are glass. In one case we see a queen laying eggs and the method of caring for them by the working bees. In another case we see a cluster of bees which are queenless, but busily engaged in rearing brood in the cells and making for themselves a queen by the peculiar methods used by this ingenious insect in maintaining its existence. There is shown a full sized colony at work in the "supers" or honey boxes, nursing brood and carrying on all the operations of an industrious colony.

An interesting exhibit shown at different places are the seeds of various

honey producing plants. Here are alfalfa, white clover, alsike, sweet clover, buckwheat and a large number of less known seeds which are handled in a commercial way by nearly all the dealers in bee supplies.

In the line of products there is less variety than one would suspect, although those sections of the country where irrigation is the method of farming and alfalfa the standard crop show honey of a greater degree of uniformity and perhaps of a higher quality than will be seen in states like Nebraska, where bees gather honey from a very large collection of plants. Utah has an especially attractive exhibit of alfalfa honey which will be appreciated by any lover of the bee products. The products of Texas show a large amount of variety, and Kansas stands well alongside of Nebraska in the character of the products of her apiaries.

We have not gone into details in describing the bee and honey exhibits of the other states simply because their exhibits give more attention to the commercial interests of the bee keeper than they do to the ornamental or educational features, and what they exhibit is duplicated in the Nebraska exhibits which we have described. The visitor at the bee and honey building will of course find the exhibits of far away states like Utah and Texas quite as interesting as those of Nebraska, and among them all he can spend a few hour or a few days time to very good advantage, and certainly with great interest.—*The Nebraska Farmer*.

The Rest of the Year Free.

To all new subscribers and all those who will renew now, we will send the *Busy Bee* the rest of the year and all of 1899 for 50c, the price of the paper one year. No premiums with this offer.

Home Department.

Conducted by

EMMA INGOLDSBY ABBOTT.

This page is open to all lady readers of the *Busy Bee*. Any woman who has found anything helpful in her work is invited to give others the benefit of it through these columns.

He That Overcometh.

EVERY pathway hath some brambles,
Every rose hides some sharp thorn,
Every sunbeam creates shadows,
Every heart sometimes is torn.

Every joy will have an ending,
Every soul have some regret,
There would never be tomorrow
If today had no sunset.

You will find the grandest rivers
Never flow straight to the sea,
Many mountains rise before them,
Yet they sing on merrily.
Mountains cannot stop the rivers;
They but turn and onward go,
Winding through the verdant lowlands,
In a ceaseless overflow.

Heed the lesson nature teaches—
Pain and pleasure brothers are.
He that hath abiding courage
Finds the gates of joy ajar.
Only in the world celestial
Can we hope for perfect bliss,
And he only will attain it
Who acts manfully in this.

—WILLIAM E. SHEFFIELD

Conveniences for the Kitchen.

Many a young housewife, with limited means, in furnishing her house, commences with the parlor and ends with the kitchen. This is quite likely to prove disastrous to the prospects of a well-furnished kitchen, as in most cases there will be scarcely enough money left to purchase the barest necessities.

She may not go quite to the extreme of the young couple who provided furniture of the most elegant and costly description for the two upper floors of

their dwelling, but supplied the poor maid in the basement with a drygoods box for a kitchen table, but she will probably start in with the idea of making one article do the work of several. As a matter of true economy of time and money, this is a mistake. A dishpan that has to do duty as a bread pan, preserving kettle, clothes basket, and numerous other uses, will wear out enough faster to make it pay in the end to have a separate utensil for each special use, to say nothing about the cleanliness and convenience of so doing.

Our young housewife will be wise if she omits the lace curtains or some dainty article for her parlor and invests in a complete outfit of kitchen utensils. She will find the work there so much pleasanter and easier that she never will be sorry.

Perhaps I ought not to have said a *complete* outfit, for there are so many handy contrivances and labor-saving articles on the market that it is difficult to decide what to select. Individual preferences and methods of work will determine what each one needs in in the larger articles, but there are many little things that can be picked up on the five and ten cent counters that are needed in every kitchen. An asbestos mat, or two, an iron dishcloth, an egg beater, paring knives, a wire broiler, cooking spoons and forks, a salt receptacle, a wire vegetable dipper, a cake turner, bread and butcher knives, a wire strainer, a flour sifter, a collander, one or two funnels, a nutmeg grater, a large grater for horse-radish, etc., a quart measure, a potato masher, a rolling pin and small brushes for cleaning vegetables can all be bought for a small sum.

These, with plenty of granite and iron cooking utensils will do for a start. After a time, as means will permit, add other conveniences; among them, let there be a double boiler, a

meat grinder and a small pair of scales.

With a well equipped kitchen, the worker not only saves time and labor, but experiences the satisfaction that comes from work done neatly and with despatch.

Don't Be Too Clean.

Did you ever stop to think that one can be too clean too scrupulously, immaculately clean? Well, I have, and find that too much cleaning is often done at the expense of health and happiness. Some housekeepers do not understand the value of properly balancing their duties and therefore end day after day without accomplishing very much. Perhaps they have their back porch so clean that one could almost see herself in it, but their rooms in general are in dirt confusion, whereas, by a little weight taken from this side of the scales and a little more put on the other side, much more might have been finished and enough work well done—and done well enough.

If it be true (and there seems little room for doubt) that "Cleanliness is next to Godliness," then orderliness would follow next. I think there are many households where, if some of the scrubbing and other drudgery were dispensed with and a little more order made to prevail all through the house the occupants would be much happier.

Phrenologists tell me that my own bump of order is not well developed, therefore my career of housekeeping, which fortunately lasted but a few years, was not one to be envied. My old colored mammy used to tell me that the state of one's house indicated the state of the housekeeper's mind. If everything were topsy-turvy the house-keepers mind was disturbed and ill at ease, while if everything were in its place and ord

reigned supreme, her mind was at ease and contentment glistened on her countenance. I half believed her then; I fully believe her now. What is more trying to the patience of husband, children, or even the pet cat, than a snarly, discontented woman or a house all in disorder?

"A good sweep is better than a poor scrub"—and a good scrub is sometimes superfluous, we might add, so don't do so much hard scrubbing on bended knees, only to be dead tired and in a nervous, fretful condition when your family comes in to dinner. Give a good sweep, give things an orderly arrangement, dusting included, of course, then get yourself in order; and if there happens to be a spot on the carpet, or under the stove, caused by a recent accident—simply ignore the fact until you can get time to attend to it—talk to the family about—oh, well, for instance, how beautifully your flowers are doing, what an interesting little story you have just found in the children's department of a late magazine, or you might venture a comment on politics if you are sure you know on which side of the fence you are going to fall.

Don't be too clean! Be orderly, be managing, try to be contented, and rest assured that you, as queen of your own house, will be crowned with a charm and a soothing, gentle influence that will penetrate deep and everlastingly into the hearts of all who come within your regime.—Lucy M. Stout, in *Homestead*.

Mrs. Hattie N. Bemis of Arabia, Nebraska, is planning the establishment of a co-operative farm on which female labor alone will be employed. It will be located somewhere in north-western Nebraska. By the application of proper methods of tillage, Mrs. Bemis thinks the danger from drought can be obviated. She will buy land

and stock and furnish funds to carry on the work the first year. She will endeavor to secure destitute farmers' widows on the theory that they are both deserving of help and will better know how to take advantage of the opportunities she proposes to offer.—Selected.

"Would you like to hear my idea of a good house to live in for farmers of moderate means? One essential, in a comfortable house, is to have the chambers over the living rooms, with stove pipes going up through the floor to chimney. A common stovepipe will keep a room warm enough to sleep in, or, if wanted warmer, a radiator in the pipe is as good as a stove. Again, every home ought to have a bedroom on the first floor, large enough for two beds, for convenience in sickness. Another thing is a cupboard in the wall between dining room and kitchen, with doors opening each way. Drawers beneath are nice."—*Emma Pierce, in Live Stock Indicator.*

Wanted Articles.

We can use more articles for the paper a year. If you have anything you think will be of value to readers of the *Busy Bee* suited for any of the departments, put it on paper the best you can, and send it on. If we can use it we will be glad to send you the paper for a year, not simply in payment for the article, but in recognition of your disposition to help the *Busy Bee*, and at the same time instruct its readers in better methods of doing things. Of course, this offer is not made to professional writers, as they have a right to expect more pay, but we will assure them that even they will find some good hints in the *Busy Bee*.

Send on your articles,—tell us how your bees have done, how you have made a success with poultry, how you conduct your home affairs, how you would like to see the youth of the land educated, or anything else of practical value, and we will make room for it as soon as we can.

THE BUSY BEE.

A monthly journal devoted to Farm Bee Keeping and other Minor Interests of Progressive Agriculture.

REV. EMERSON TAYLOR ABBOTT,
Editor and Publisher.

Price, 50 cents per year, payable in advance.

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Editorial.

ONE of our subscribers tells us that coal oil is splendid for bee stings. Try it the next time you are stung.

We have inserted several articles this month on the subject of robbing, as the time is at hand when bees are apt to engage in this pastime. It is not very amusing, however, for a man who has a large apiary when he gets a genuine first-class case of robbing. At such times one needs a good spray-pump and a good smoker, as there is nothing like smoke and water to bring bees to their reason when they get on a rampage.

On another page will be found an article copied from the *Nebraska Farmer* on the apiarian exhibit at Omaha. I desire to call particular attention to this article, for I feel, as I have said before, that bee-keepers are under special obligations to the management of the Exposition for the recognition they have given the industry.

After January first the price of all hives except the "St. Joe" will be advanced, when shipped out of here. I do not know at present what the factory prices will be. Those who need hives for next year will save money by ordering this fall, as all orders will be filled at present prices until January first.

Everyone who has bees needs a good bee veil. I desire to call the attention of our readers to the offer found in another column of a good bee veil and the *Busy Bee* for one year, both for 50c: This veil is made of good material, and I have only a limited number that I can furnish in that way, so order at once if you want one.

We will send the BUSY BEE one year and a choice tested Italian queen for the rest of the season, both for \$1.00. It will take a week or ten days after we get the order before the queen reaches you. Please mention this notice when you order. These queens will be purely mated, and just as good as you can buy anywhere. We want a circulation of 5,000 copies, and we make this, and the many other liberal offers which will be found in this number, that the first of January may find us with that many paid up subscribers.

Honey Wanted.

I will pay cash for either comb or extracted honey of a good quality. If you have any for sale, let me know how much and what you ask for it.

We have received a communication for the *Busy Bee* to which no name is attached. I wish to remind the readers once more that all articles intended for publication must be signed by the real name of the writer. The editor of this paper does not believe in assumed names. If you have anything good to say we will be glad to have you say it over your own name. If you have anything bad to say, we surely prefer that you say it over your real name. If this catches the eye of the party referred to above I will be glad to have him give the readers of this paper his experience with bees in prose. Please do not send us any rhyme or poetry. We prefer to select what we use of this.

“When a bird flutters you may know that it has been hit,” and it must be the editorial in the *BUSY BEE* about Bro. Leahy’s fulminations against “the Roots,” as he is pleased to call them, struck a vital spot. It took two ponderous editorials and two pages of space in the August number of the *Progressive* to set the matter right. There is no end of talk about “pots and kettles,” bad hotels, etc. Well, men must have something to fill up with, and when they have no better material at hand it is probably just as well to throw in a little spice in this line.

The *BUSY BEE* is “given away” is it? Who told you so? I venture to say it has made its proprietor more clear money during this year than the *Progressive* has made for its owners.

“Brother” and “friend” are “ironical,” are they? Is it “ironical” to threaten to drive a man out of the country “if it costs a thousand dollars,” provided he does not trade with you? Have a care, Bro. L., you may be treading on dangerous ground when you venture to predict what will have an influence on the public mind. The *BUSY BEE* is abundantly able to take care of herself.

Notice to Advertisers.

Our present rates of advertising are very low. Lower, in fact, than they should be, considering the character and circulation of the *Busy Bee*, so that we have concluded to make a material advance in rates, beginning the first of the year. All advertisements received before that time will be taken at the old rate, so if you want to secure space at the reduced rates, you had better do so soon.

Annual Meeting of the United States Bee-Keepers’ Union.

Omaha is the place, September 13th to 15th the dates. Let every bee-keeper who reads this begin now to make arrangements to attend. There will be reduced rates at the hotels and also low rates on all railroads. The programme is not ready yet, but Secretary Mason writes me that it will be a good one, and says that Secor of Iowa; Niver, Marks and Elwood of N. Y.; Hill of Penn.; Root and Boardman of Ohio; Poppleton of Florida; Dr. Brown of Ga.; Dadant of Ill.; Abbott of Mo.; Whitcomb and Stilson of Nebr.; McIntyre of Cal.; McEvoy and Pettit of Canada, and others have been placed on the programme.

By all means do not fail to attend this, the most important meeting, in my opinion, the Union has ever held. If you *can not* come, send your dollar to Eugene Secor, Forest City, Iowa, and become a member of the Union anyway. It will help the Union and may prove of great value to you.

Shipping Cases.

We have a large stock of them, and need the room where they are stored for other purposes. If you need a quantity of them, I will quote a very low price on them.

Apicultural Education.

I met a beekeeper the other day who relieved his mind by saying, "I have read one of your articles lately, and find that you are going over the same ground you did ten years ago. Why don't you scare up something new? Do you suppose old beekeepers want instructions about catching a swarm? Why, we want something besides the A, B, C of beekeeping."

"You surprise me," I replied, "and in the slang of the day, you make me very tired. You don't want the A, B, C of beekeeping, but don't you suppose that others do, and by others I mean new beekeepers, old and young! Do you suppose that education stopped after you had learned your letters? The teacher of anything is passing from A to Z year after year for a lifetime. Education is not for those so learned as you. No man attempts to put more into a full sack."

"Well, I didn't think of all of that. Perhaps you are right. But give us something new."

"Something new" is good. It is not easy to find something new for an old beekeeper that is good for anything. A farmer (that is what he said he was) announced that he had discovered a new way to plant potatoes. He planted the seed, eyes down, and covered with earth; then he laid on top of the seed a shovelfull of barnyard manure, and covered it, and then a spoonful of commercial fertilizer on top of that, and covered it also. I did not hear how large his crop was. That potato must have been surprised when it woke up and began to grow, (if it did), with its eyes pointed toward the center of the earth, and to find at last (if it did) that the food it wanted was on its back. Of what use to a turtle would be food on its back if the turtle's neck could not grow long enough to reach it?

Some things called "new" in beekeeping are as useless as the new idea of planting potatoes—vain imaginings of idle persons without a grain of horse sense. Every spring new beekeepers appear and every detail of beekeeping from A to Z interests them; and for these beginners, chiefly, are articles written. The beginner is of more importance, in one sense, than the advanced beekeeper—the one can go alone, the other may not.

If you intend to enter the field as beekeeper, begin in the spring: find your bees and arrange for their transportation, and make ready all preliminaries. If your object is to test beekeeping as an occupation to see what may be made of it, begin with three colonies, and no more. One colony is not enough, for the one might be an exceptional colony—too slow or too fast.

If you are in earnest, the first season always should be one of experiment. Many failures have occurred because the beginner undertook to be a full fledged beekeeper the first season. Begin small, go slow and stick to it.

GEORGE APPLETON,
in *The Wisconsin Agriculturist*.

Agricultural Education Agriculture in Common Schools.

BY DR. GALEN WILSON.

A western journal says: "The study of agriculture in the common schools is receiving the attention of many of the thinking men and women all over this country. The faculties of some of the agricultural colleges have taken up the discussion. Half the population of the United States live in the rural districts. Why not give them a chance to learn some of the principles underlying their avocation?" All of this is truly and wisely said, and the agricultural press and Farmers' Insti-

tutes may as well prepare to discuss the matter, for the subject will be before the people until it is settled, and settled rightly, by giving the farm youth opportunities "to learn some of the principles underlying their avocation." Unless they get a start in the right direction while at the district schools, as a rule—they will be like their fathers—rut farmers. Ever since the foundation of this Nation the country schools have ignored the very name of agriculture, and a Nation of poor farmers is the result. Is it not high time to remedy this glaring defect in the instruction of farm youth?

The most ardent friends of this movement do not propose to add to the country school district curriculum any regular course in agriculture. They would only give the pupils a start in a few of the first and most useful principles of scientific, practical agriculture, such as they could apply at once and see the benefits arising from their application; this to give them the desire to go further. Then when their common school days terminate, they will certainly continue their investigations by gathering about them agricultural books and papers and studying their contents. Better farming results will be in evidence at once. All agricultural papers are clamoring for more subscribers, and nearly all the agricultural colleges are lamenting the dearth of students. Before either can be supplied in such numbers as they should be, must not people be taught the need of these facilities? And if they are not taught this need when attending the common schools, nine out of ten will never know it, but will follow in the footsteps of their fathers and be "slipshod" farmers. I cannot understand why an agricultural paper, or the authorities of any agricultural college, can so stand in their own light as to oppose so beneficent and reasonable a proposition as

the subject of this paper. An objection that some interpose is, that there are not suitable text books or teachers. To this I will respond, as I have in the P. F. before, that there are suitable text books in print, and that any one fit to teach a common school can teach the first principles of scientific agriculture from them, enough to give the youth a start in the right direction and which path they will be most likely to pursue to greater scientific achievements in agriculture. Have I uttered even one unreasonable thought?

Several times I have stated that the study of science alone leads from the farm, but applied agricultural science leads to it. The former proposition seems to be proven by the fact that several professors of agriculture oppose introducing the subject into the schools under its proper name. In conference with a professor, who is also a farmer and an advocate of agriculture in schools, I expressed surprise at such opposition. He replied. "It seems rather curious to me, as to you, that such men should hesitate to come out strongly upon questions which I am sure they cannot but believe to be of primary importance in the development of our agricultural industry, yet in some cases I can see how they might object on the ground of expediency, and also because their training is rather in purely scientific lines, and that they are not in entire touch with the farming community." In other words, their sole devotion has been to science, and this has had a tendency to lead them from the farm. On the other hand, it is noticed that the state secretaries of agriculture who have publicly expressed their opinions, have uniformly approved the movement. They are nearer the mass of people and the farms, and consequently know their needs better. The secretaries are "in entire touch with

the farming community," as their business is almost entirely with active farmers. Teach the boy a little applied science. "Touch the button" and he will do the rest. It is hoped that the agricultural press and speakers at Farmers' Institutes will discuss the matter thoroughly, for "there is wisdom in a multiplicity of counsel." If at any Institute the question be not on the regular programme, any attendant can write it out, drop it in the the question box, and then it will have to be discussed. The following is a suitable form: "Is it advisable to add to the curriculum of the country common schools the study of the first principles of practical scientific agriculture."—*The Practical Farmer*.

The United States Bee-Keepers' Union.

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Poultry.

An Interesting Talk—Chickens, Mulberries, Etc.

By MRS. L. HARRISON.

SO you've let the chickens into the apiary, have you! Well, they'll scratch, but will pay for the privilege, in catching moth millers, ants, bugs and worms.

How I love the dear, little, downy balls. I've none this year, for the cats catch them, but if I had a run, fenced with woven wire, I would have some, also a force pump to throw whitewash into every crack and crevice of their house, and in early spring and summer a hot water bath, mixed with kerosene in the nests and upon their perches—I would not have my fowls tormented with mites or lice. No, they should be happy.

While I've no chickens, I've a "right smart chance" of robins and other feathered songsters. I can hear them almost any hour in the day. The robins are so tame, and look at me so cunningly with their light bright eyes. They enjoy a bath from the nozzle of a hose, while spraying the yard with water from a hydrant connected with the city waterworks. They stand up so straight in the spray, and pick up worms brought to the surface by the water.

Why the birds love us is owing, in a measure, to a large mulberry tree which furnishes them with rich, juicy food for a long time; they prefer mulberries to cherries. In a chicken run in Florida I saw a large mulberry tree that furnished ample shade, as well as berries for the fowls. The owner said he "planted better than he knew." A negro told the writer that his chickens lived upon mulberries for four months

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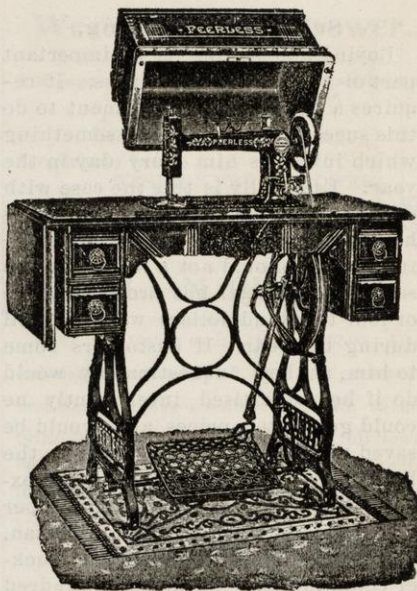


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without any other food. A man living on the banks of Santa Rosa Sound said that he fenced in a small enclosure in which were mulberry trees, and put in it a sow, which lived and grew fat upon mulberries alone, refusing water, being satisfied with the juice. Small pigs came in also, through apertures in the fence, and shared the fruit, also, which continued to supply them for four months.

The mulberry belongs to two families, having the pistillate and staminate flowers in different trees—familarly known as male and female trees. Plant them in chicken runs and apiaries, and the birds will pay you in song and rid your orchards of insect pests. The wild ones are preferable to the Russian, being nicer trees and yielding better fruit in flavor and size.

Peoria, Ill.



THE PEERLESS MACHINE.

When to Begin With Incubators.

To succeed with an incubator it is necessary to learn all the details, and the time to do this is not when the chicks are to be hatched as early broilers, but during the interval when the loss, if any, will not fall heavily. The time to begin to hatch early broilers (which are sold at any time after January), is from October to Christmas, but those who then begin may make mistakes, and by the time they learn how to be successful will have reached a period too late in the season to secure the best prices. As eggs are cheap at this season, and the cost of operating both the incubator and brooder will be a minimum sum, the beginner cannot do better than to operate his incubator now, as he will then be prepared to enter upon the winter work with experience in his favor, and will avoid much unnecessary vexation and delay. The loss in winter may be serious, but in summer experiments may be made with a lim-

The handsomest and finest proportioned sewing machine now manufactured. A strictly high grade machine, with all modern improvements; light running and noiseless. All the desirable features found in other modern machines will be found in the Peerless.

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ited number of eggs and at a cost which will be but little.

Every farmer who raises poultry should take an interest in artificial incubation. It is the "early bird" that brings the high prices, and as hens will not sit until so inclined, the use of an incubator gives control of the period for hatching. An incubator holding 200 eggs will hatch more chickens than twenty hens, and bring them all out at once, thus insuring uniformity of size when marketing them. It is true that to operate an incubator requires skill, but now is the time to begin to learn. There is nothing that will pay so well in winter as an incubator, and farmers will find it profitable to experiment in that direction. They may fail at first, but like the novice with the bicycle, the work is not difficult after experience is gained.

P. H. JACOBS,

in *American Gardening*.

A Profit Not Estimated.

When a large flock of fowls is kept on a certain area of ground there is a daily deposit of manure. Apparently such accumulations may appear insignificant, but the increase is daily, and the ground receives a large quantity of poultry manure if occupied by the fowls for a great length of time. The fowls will also destroy many weeds while confined in the yards, either by using them as food or trampling them out of existence, which prevents them from producing seed, and there will also be deposit of food left over from the meals. The droppings of the fowls are not lost, but are carried down into the

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soil by rains, where they become available plant food for crops. All of the food consumed by fowls does not go to the production of eggs or the support of their bodies, therefore, a quantity is voided and represents food not used for the purposes intended, but it is returned again for future use in the form of manure, and is entitled to a place in the list as a portion of the profits derived, in proof of which it is well known that poultry yards bear enormous crops, and also retain their fertility for several years in succession.

—*American Gardening.*

Selected.

The Companionship of Nature.


SINCE reading the Institute Special on "Farm Isolation" I have thought more than usual about the companionship which may be found in nature. Perhaps one reason for this is that these summer days I am privileged to live close to nature's heart and am feasting upon the delights she spreads forth in summer weather. Last evening as I watched the matchless panorama of the setting sun, and bathed my soul in the beauty of the night, I felt profoundly sorry for those whose eyes are holden so they see not. Some years ago it was my lot to spend several months in the country, in western Ontario. I taught the district school and boarded at the nearest farm house, which was an old log structure, The house did not trouble me at all. I lived out of doors most of the time and feasted on the good things mother nature prepares so bountifully for her children. My hosts, like the many who live unconscious of their blessings, were blind and deaf to the sounds and sights which might have doubled their joys in living, and it was a standing joke



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with them that "the schoolma'am would rather miss her supper than the sunset." About five miles away on the other side of the village, was a picturesque spot known as Rock Glen, which visitors to the neighborhood made a point of seeing, as it had more than a local reputation. After I had been there a few weeks I visited the Glen and was completely carried away by its wild loveliness. A tempestuous little torrent tore its way down steep rocks, foaming and raging as it tumbled along; behind it lay the hills in all the glory of their gorgeous October dress. The picture enraptured me and with girlish enthusiasm I dilated on its beauty on my return. My host listened awhile and then interjected, "There's a mill there; I've

been with grist sometimes;" a slight pause, and then, "It's a durned rough hole." On such a man the glories of Niagara would be wasted; he would be like the Irishman who, beholding the falls for the first time, and showing no emotion, was rallied for his lack of appreciation, "Faith," said he, "I see nothing so wonderful in water falling down over rocks; if it were climbing up that would be something worth talking about."

Such blindness to the beauty freely offered us is, to my thinking, truly deplorable, and the more so that it is not natural, but acquired blindness. For some years my summers have been spent at different lake resorts and I have met a variety of children. Almost invariably upon acquaintance I find that they love flowers and are interested in bugs and birds and all living things. They seem to see beauty in wayside weeds and to have keener ears for nature's music than older persons. Once their attention is called to the everchanging sky pictures they love nothing better than to gaze into cloudland and see mountains of castles among the mists or ships upon its billows. Its wealth of color entrances their youthful fancy and sky gazing becomes a delight. It is older people only who seem insensible to the beauty nature unfolds from day to day, and for this reason teachers should be encouraged to spend a good deal of effort in educating the young to a fuller appreciation of nature. There are unfathomable mines of pleasure in the animal and vegetable kingdoms but, as with other precious metals, the riches must be delved for. He who digs deep it is who finds most treasure, but fortunately for those who have lacked advantages rich nuggets lie near the surface and none are too old to begin in this Klondike realm. If every evening one will face the west and watch King Sol pass by in his gor-

geous chariot, if one will wait for the Queen of the Night and steep one's senses in the silver moonlight it will not be a great while until the soul will stir and some night, as the sky becomes irradiated, a great wave of feeling will engulf one; in the silence care shall be unsealed and the scales shall fall from eyes long holden and Mother Nature will rejoice in the new birth of a child.—*Live-Stock Indicator.*

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