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NO. 5.

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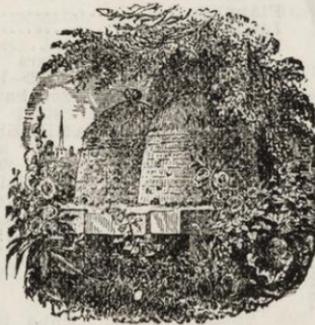
A Monthly Journal
Keeping and the other
to-Date and Progress.



devoted to Farm Bee
Minor Interests of Up-
sive Agriculture.



THE BUSY BEE.



BY INDUSTRY WE THRIVE.

EMERSON TAYLOR ABBOTT,
EDITOR AND PROPRIETOR.

ST. JOSEPH, MO.

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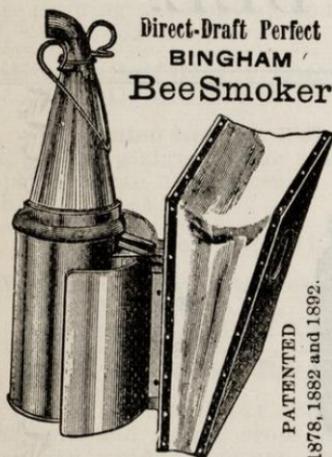
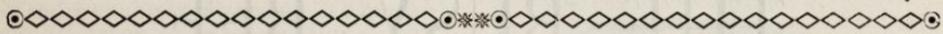
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Please mention The Busy Bee.

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Cuba, Kansas, Jan. 27, 1896.
 Dear Sir?—I have used the Conqueror 15 years. I was always well pleased with its workings, but thinking I would need a new one this summer, I write for a circular. I do not think the four inch "Smoker Engine" too large. Yours,

W. H. EAGERTY,

Corning, Cal., July 14th, 1896.

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.

PUBLISHED MONTHLY.

Vol. 9.

MAY, 1898.

No. 5.

The Honey Crop. When to Put On The Supers.

By C. P. DADANT.

MANY unskilled apiarists imagine that the honey crop begins just as soon as a few blossoms open in Spring, and that it lasts throughout the summer. They therefore put on the supers as soon as warm weather comes, and leave them on through the entire season.

This method, which, of course, is not followed by practical and experienced bee-keepers, has great disadvantages. The supers when put on too early give too much empty space above the brood combs and render the hive more difficult to keep warm. During the early months, the most important thing is to keep the bees as warm as possible, so their energy may all be spent in producing a large amount of brood, and the closer they are confined down to the brood combs, with plenty of stores, the better for them. Even during fruit bloom, as there are so many drawbacks, and co'd windy days, it is hardly to be expected that they will make more from the bloom than enough to keep up the supply of stores, and when the apple, peach, pear and plum blooms are gone, there is generally, in this latitude, quite a long spell in which there is no bloom worth mentioning, or at least none from which a supply of honey may be expected, until the opening of the white clover harvest a month or more later, usually. So it is best to keep the boxes off till the clover bloom appears.

There is another reason which makes it advisable to keep the boxes

away from the hive until they are needed, it is to keep them from being soiled, or as the apiarist calls it "travel-stained" by the bees. However neat and careful our little pets may be, their occupation of a box is clearly shown by the change of color of the wood, and the shorter the time which they take to fill a section of honey, the nicer and whiter this honey will appear, unless, of course it is of a dark shade, such as honey dew, or Spanish needle honey.

But, if we must be cautious for the bees' warmth, and for the sake of having a marketable article of honey, to put the supers on the hives only when the bees need them, we must be careful also not to fall into the opposite fault, which would be worse than the first; for it would cause our bees to swarm, or it would cause us to lose quite a portion of the crop. It is quite a nice point to decide on the exact time when the supers should be put on. Neither are all hives ready for them at the same time, for some colonies may be so weak at the opening of the crop as not to need supers at all.

If too little room is given the bees, or, if the putting on of the supers is delayed too long, when the honey crop has opened, they begin preparations for swarming. They acquire what is called "the swarming fever," an impulse which prompts them to make ready to issue from the hive to form a new colony, by rearing a number of young queens to replace the mother queen who will leave the hive with the adult bees as soon as the preparations are sufficiently completed. This swarming fever is well

nigh incurable, except by swarming; that is, when a colony has once provided for the issue of a swarm, any amount of room that may be given to it by the owner will prove of little or no avail to prevent their exodus. Yet should the weather prove unfavorable and a few days of cold rainy weather set in, it is probable that their excited condition would yield before this natural event, when the artificial methods of the Apiarist would fail.

Our advice, to a beginner who wishes to do the thing right and who lacks experience, would be to put the supers on a little too early rather than too late, say when the first few bunches of clover bloom begin to appear, and the colonies are of sufficient strength.

When the flow has once begun, the hives should be watched weekly, nay, even daily, in some seasons, as the large yields come like a storm on a clear day. Experimenting Apiarists, have, at different times, kept a hive of bees on a scale, to ascertain the yield. We, ourselves, tried it one season, and was astonished to find that the crop harvested would increase the weight of the hive, some days, as much as ten lbs. in a day. Cases have been known, though scarce, where the weight of a large hive increased twenty lbs. in a single day. Such an increase can hardly be expected with anything but a very powerful colony in a very large and spacious hive, with more than the ordinary quota of supers. The little eight-frame hive, which has only room for twenty-four sections but which sells so readily on account of its low price, can never be expected to produce bees enough to raise such a crop. It is a fact that the honey yield is prompt and short, usually, and the farmer's motto, "make hay while the sun shines" may be truthfully paro-

died for the bees into "make honey while the sun shines," for the honey harvest is very nearly as short as the hay harvest.

When the season is over, it is as much of a mistake to leave the filled supers, or even the empty ones, on the hive, uselessly, as to put them on too early, and the extreme of neglect, on the part of a bee-keeper, is to leave his supers on the hives all winter.

Hamilton, Ill.

Profits in Beekeeping.

I would not write or say a word to any one who is now engaged in a profitable and healthful occupation to induce him or her to abandon that, and take beekeeping as a specialty. But to those who are living in rural homes (and competition has reduced their profits to a minimum) and are looking around for some work that can be done at home, often during leisure hours, in connection with the regular occupation and which will bring that much needed dollar for the purchase of some of the necessities and comforts of life, I speak. The keeping of a limited number of colonies of bees is one of the pleasantest, most instructive, most honorable, as well as most profitable side issues. Very little time is needed and a very small outlay of capital. In many places where it would possibly be unsafe to depend wholly on the apiary for a livelihood, a limited number of colonies could be made very profitable. There are indeed few localities so devoid of honey flora as not to yield a good continuous supply for a limited number of colonies, say from ten to fifty. All this honey is now simply wasted "on the desert air," and the man who uses his intelligence to secure it, is not only bettering himself but is as much a benefactor to the human race as is the man

who makes two blades of grass grow where but one grew before. In many localities conditions are so favorable that with very little exertion and a little judgment, or in other words a little "elbow grease" and a little brain applied, will pay handsome profits. I don't want to be understood to say that you can make "big money", without work as the law "by the sweat of thy brow, etc.," applies to bee-keeping every time; but we generally have the bread and the honey too, whereas in some other occupations the "sweat" is about all we get.

In a locality not overstocked, a colony in an ordinary season will store from 50 to 200 pounds of honey. I have often cleared five dollars for every colony, spring count, and considerably more at times.

I might quote many reports and instances, but suffice to say there are hundreds who do not keep bees, but who should do so if only to fertilize the fruit blossoms, as it would pay a big interest on the investment just in this particular. At the same time, they could realize one or two hundred dollars for very little expended. There are no secrets about the business, nothing mysterious, just like any other business we must use a little work, a little "know-how" and a little common sense. Spring is the best time to begin.—L. W. LIGHTY, in *American Gardening*.

Do Bees Injure Small Fruit?

By L. V. BENNETT.

ALL the bee papers and a good many different writers have discussed this subject, and what I may say may be nothing new. Of course, we all have our "hobbies" on this subject as well as others. Perhaps, if I give my own experience, it may tend to dispel some doubts in the minds of a good

many fruit growers who think that the neighbors' bees injure their fruit, as it is my aim in this article in some measure, to get them out of any such idea, for I shall lay the blame on something else instead of the bees. I have both small fruit and bees, and I have never found my fruit of any kind punctured by the bees. When I first began keeping bees, I located them among some half dozen old cherry trees; which, when they bore, if they bore at all had little gnarly, wormy fruit on them. Now they have quite nice fruit. You ask, what have I done to them? Nothing, that is, nothing more than any one who keeps his trees in shape should do. I have kept them trimmed of all the old dead limbs, suckers, etc., but have never sprayed them, and I honestly believe that the bees have as much to do with their being nice fruit on them as anything. When the trees are in bloom it fairly roars, there are so many bees among the blossoms, and I think this is one reason that there is better fruit now than formerly. For not only do so many bees tend to keep foreign insects away, but the more the bees work on the blossoms the more perfect is the fertilization of the blossoms. I have never seen them at work on the fruit, either sweet or sour, I have however seen them at work upon the grapes, and right here is where the fruit growers are in error; they see the bees at work upon the broken fruit, and they think they are the cause of it when they are not.

I have a small vineyard of several different kinds of grapes. Two years ago I found a good many bees among my vines, and I began to inquire into the matter, and what did I find? Well, I found a good many of the grapes with a small three cornered puncture in them, and wherever there was a grape with the skin broken in this way, the bees were at work. We

all know the bees will never let any sweet go to waste if they can get at it.

Now, every one knows, I think, that bees cannot tear a three cornered hole in a tough grape skin. I set myself to watching to find the cause if possible, and I found it was nothing more nor less than that little pest which is becoming a nuisance all over the continent, the little English sparrow, which was the guilty party in this case. What is true in one case may prove true in another. I watched them and saw them pecking the grapes, and as I said before, after the skin was broken the bees went to work to gather what sweet they could.

Now, please do not blame the bees until you are sure that they are the guilty ones in the first place.

I will wager that the only injury that a fruit grower ever received from a bee was when the bee went for him with his business end.

Bee-keeping in Wisconsin.

By L. ALLEN.

I have lived in Clark county, Wisconsin, for thirty-two years, twenty-four of these years I have kept bees, with various results. Have wintered mostly in cellar. Have never been obliged to feed a pound of sugar or honey to my bees, and I have never had a total failure.

I have used a number of different hives, such as the American, the Langstroth, the Bay State, Alley hive, and the Dr. Tinker hive. The two last named I now have in use. I have been able to see but little difference in the amount of honey gathered, or stored in the different hives. I think if the bees are properly managed, one may expect good results from either. I think, however, for comb honey, and that is the kind I work for, the Alley and Tinker hives are the best. The prices of honey have varied very much

within the last three or four years when I sold for ten and twelve cents per pound, I am surrounded with basswood forests. In the rear of my yard, and that is to the west, are hundreds of acres of pine slashings which in summer and autumn is a sea of flower bloom of various kinds. The roadsides in June, and all by-places as well as the pasture, are a mat of white clover bloom. I think I never saw in any country, and I have been in thirteen different states, such a profusion of dandelion. In early spring the bees bring in pollen in great quantities.

We have wild cherries, raspberries, strawberries, thorn apple and lots of other honey producing trees and shrubs.

Last year was not extra good for honey. The spring opened most propitiously, was indeed flattering, but just at the beginning of the honey flow there came a sudden change in the temperature of the weather to wet and cold, cutting off all honey resources from white clover and basswood. Later on the weather became warmer and bees did fairly well gathering honey from Alsike clover, buckwheat, goldenrod and asters. I think our bees gathered on an average per colony in this county 50 lbs. of honey.

Clark County, Wisconsin.

Farm Bee-Keeping in Maine.

MY stock at the beginning of last season was nine colonies. It increased to fourteen and took some over two hundred pounds of comb honey.

I winter in single walled Langstroth hives on summer stands, using division boards and chaff cushions. I gave them a smaller entrance this winter than ever before, and it seemed sufficient, about a half inch by three eighths during three months of the coldest weather. No loss yet this win-

ter. March ninth they had their first fly since early fall.

I make all my hives and fixings. Made a Clark smoker at a cost of only ten cents in money. This was for the tin. I have used it five or six years, and it is good now. I make my T tins for supers out of old tomato cans. I use cotton cloth well oiled with linseed oil to lay over the frames in summer. I use no honey boards, set the super right on the frames. This may not be scientific, but it works well with me. I am inclined to use more foundation each year; and find it profitable. I have become satisfied that stimulative feeding in the fall pays, I am not so sure about spring feeding. I am now using sections an inch and three fourths wide, and like them better than any wider.

I used bottom starters in sections last year, and liked them, but the bee gnawed them out some, I suppose I left too much space between them and the top starter.

H. E. MILLER, N. Searsmont, Maine.

Orchards and Bees.

By MRS. LIZZIE IRELAND.

SO much has been said about horticulture and apiculture, going together, that it is useless for me to say more. Almost every one is convinced that fruit bears better where bees are kept and it is a settled fact that bees do well where there is plenty of fruit bloom, but there are a good many farms that have neither orchard nor bees. Now, let me tell you that farmers who do not keep a few bees, and have a small orchard are losing money every year, even if they do not sell a pound of honey, or a bu. of fruit, by not supplying their own tables with the food that is among the healthiest produced, and thus save buying, or worse yet, doing without.

What can I say to induce every

farmer who does not have an orchard to begin this very spring, and set out a small orchard of one or two or even ten acres? Fruit trees are so cheap, two year old trees at ten cents apiece of almost any variety and it takes about sixty-eight trees to the acre. Just think what a small amount of money it will take to get your orchard started! About seven dollars for each acre set out, and in five or six years you will reap your reward, by having a fine crop of fruit, providing you have taken care of your orchard. Please remember one thing, that cattle and fruit trees will not do well on the same ground, therefore, fence your orchard by all means. I am taking it for granted that you intend to get two or three colonies of bees, and have them help pay the expense of the orchard, until it gets to bearing. You can help the bees in the production of honey, by sowing the ground between the fruit trees to some of the honey producing clovers. When your orchard begins to bear you can count on an income of not less than \$100 per acre, one year with another, as this is not counting a full crop.

How pleasant it will be to go among the trees in bloom, and see the little busy bees gathering honey to store away in the hives! You will feel that you haveturned over a new leaf and be almost sure there will be enough honey to pay the taxes, after keeping a good supply for the home demand.

When fruit is ripe, won't the children have a picnic, helping father gather and sort the beautiful, rosy cheeked apples?

Republic Co., Kas.

The fruit-men of California have ceased to denounce the bees. We rarely hear other than praise of the little honey-gatherers.—PROF. COOK, in *Gleanings*.

Agricultural Education

The Farmer's Education.

THE farmer's education should fit him for his occupation. The education of the schools is quite generally appreciated. It is to urge the need of a broader education for the farmer than the common school affords that I write. The broader the training or school culture, the greater the enjoyment. I do not think this position likely to be assailed. A second feature of this question fully as obvious, is the broader and more thorough the education the higher the price received for work. I have actually seen parents and guardians who objected to their boys and girls acquiring education, because it would make their labor too valuable for the farm.

The purpose of this line of thought is to suggest the pressing need of higher and more useful education in fitting for farm labor. The most profitable use of time should be the aim of every boy and girl in school, as well as out of school. Time used in fitting oneself for work is well used. All practical knowledge adds to the laborer's worth—if he knows nothing his labor has no value. The man's knowledge and worth are judged by his work.

Geo. Washington and Abraham Lincoln added to the value of their hand labor by study. Both began as surveyors. To this knowledge they added—Washington, a knowledge of war; Lincoln of law and political economy. To-day each is esteemed and measured by his work. The use we make of our time gives us our character.

The successful management of a farm today calls for skilled workmen. Calls for expert knowledge of the underlying principles of a vast field, all rich in promise. Vegetable and animal physiology, mechanics, botany,

geology, chemistry, entomology and the laws governing the three kingdoms, are prime needs. We lack space to urge the importance of each of these sciences. Each adds to the value of labor, and the value of the laborer's hire, and the happiness of the worker. The operation of our farm machinery shows the need of a knowledge of mechanics.

No man should esteem himself fitted to manage a farm who cannot read the plants thereof,—know the name and possibilities of the plants he cultivates, as well as those he destroys. Botany adds to the value of labor—adds to the enjoyment of the laborer. Every farmer should become an enthusiastic botanist. Doing so, his labor is increased in value and his state developed in resource.

We now turn from the dollar side of our subject, to its aesthetic side. All labor has for its purpose the building, or the support of the home. A happy home is created and maintained by the united labor of man and woman. That education is defective which is wanting in ability to act well its part in making home pleasant, interesting and happy.

I was once asked what it was that caused Arkansas, one of the best states in the Union, to be neglected—to remain unsettled; while states vastly poorer were growing yearly by hundreds of thousands. I at once replied: "It is the influence of that song, 'The Arkansas Traveler.'" All over the earth that song has traveled I have heard it in the theaters of the city and the logging camps of the pine woods. Everywhere it has fixed a low standard for Arkansas. I urge the boys and girls to prepare themselves to do their part toward providing and maintaining a home they can love and support—a home in which the conversation, amusements and entertainments shall be ennobling and

character building. Woman excels man in home graces as a rule—the greater need for him to study the needed refinements of home life.

The work of to-day is home-making. The farm demands it. The duties of the coming generation are all of a higher order than of the past. The laborer must be better prepared for his work, or be content with the rewards of our labor—labor in the line he is fitted for. There is a pressing demand for skilled labor.—W. H. GARDNER, in *Coleman's Rural World*.

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.



Editor Home Department.

A Chapter About Children.

By Margaret E. Sangster

Yes, I love the little winner
With the medal and the mark;
He has gained the prize he
sought for

He is joyous as a lark.
Everyone will haste to praise him,
He is on the honor list;—
I've a tender thought, my darlings,
For the one who tried and missed.

One? Ah, me! They count by
thousands—
Those who have not gained the race
Though they did their best and
fairest,

Striving for the winner's place.
Only few can reach the laurel,
Many see their chance flit by;
I've a tender thought, my darlings,
For the earnest band who try.

'Tis the trying that is noble;
If you're made of sterner stuff
Than the laggards who are daunted
When the bit of road is rough.
All will praise the happy winners;
But when they have hurried by,
I've a song to cheer, my darlings,
The great company who try.

The American.

House Cleaning.

IT seems to be the fate of humanity that we must many times be misunderstood, even by our best and dearest friends; and when the masculine half of our race cherish the idea that a woman takes a sort of fiendish delight in an annual or semi-annual upheaval of household belongings, they are "away off!!" (excuse slang, please.)

The fact is we all dread it like we dread a visitation of measles or chicken pox or whooping cough in the family, but dust and dirt that cannot be reached by the ordinary methods will accumulate, and unless we are content to let them remain to breed disease

and disgust our finer sense, we must adopt heroic measures. When a sensible woman concludes a thing has to be done, she goes to work and does it without whining about it, and the consciousness that it is done is her reward.

If she is wise, she will endeavor to do her tasks with the least outlay of strength and nervous energy. If one had to choose between the lesser of two evils, it were better that the house be not cleaned at all than to have it spotlessly clean with a sick woman, and a heavy doctor bill to pay, but in most cases both of these extremes can be avoided.

There is some work in house-cleaning time that is too heavy and hard for a woman of ordinary strength to attempt. Not one woman in ten thousand is strong enough to lift, beat and stretch heavy carpets, or move stoves, pianos, and other heavy furniture. If a woman cannot get the men of a family to do these things, she ought to assert her rights and hire it done, even if the head of the house does grumble at the expense.

It is a mistake to hurry through the work, intent on going over the whole house in the shortest possible time, regardless of weather or aching muscles. Take one room at a time, choose only bright, warm days for the work, and if warned by that "that tired feeling" that you are overtasking your strength, rest a few days and then go at it again. It is better to be a little longer about it than to be for weeks afterward, unfit for the daily tasks that cannot be put off.

The Cooking School.

COOKING schools have been termed one of the modern fads. In many cases they deserve the name. The ultra fashionable woman, weary of "Vanity Fair," finds an

outlet for her latent energy by attending the cooking school and her household becomes a chaos, while she airs her new theories to the discomfort of husband and children. Nevertheless, the cooking fad is gaining ground among sensible men and women who are sufficiently progressive to know that much of our health and well being depends upon the food we eat.

In nine cases out of ten the raw product that forms our food is sufficiently healthful, but unskilled cooking renders it as unfit for the human stomach as a diet of sole leather.

No wonder that leading journals cast ridicule upon the pretty cookery maid, who has attempted to place the horse behind the cart by trying to concoct tempting dainties before she has learned even the alphabet of domestic science.

The earnest student understands the absurdity of building without a foundation to support the superstructure, and it is to be hoped that the time will soon come when a department of domestic economy will be introduced in every school and that the art of home keeping will be scientifically taught.

The student should not only learn the proper proportions to be used in combining food, but its nutritive value as well and the probable effect upon the consumer. When the importance of such teachings is understood Americans will lose the name justly given, "A nation of dyspeptics." In other words, a nation suffering from indigestion.—*Montana Fruit Grower.*

The first thing a woman should do who wants to make life worth living for those dwelling under the same roof with herself is to free herself from the bondage of tradition and run her own house after plans best suited to the happiness of dwellers therein.—*Beatrice, Campbell's Soil Culture.*

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Editorial.

OUR circulation is very good, I thank you! Last month 1,157 copies. This month it will be 1,500 copies, and just for the fun of it we will make it even 2,000 next month. If you want to reach the farmer bee-keeper, we are the people who can tell him your story, and it will not cost you the price of a farm to do it. Send on your ads and we will make a place for them. There is a good deal of humbug about a great deal of advertising, but *some* of it *pays* if you do not *pay* too much for it. We are not afraid to tell you what you pay your money for. We do not want something for nothing, and we hope you do not.

Mr. Dadant discusses this month a subject of vital importance to every bee-keeper, for on the proper manipulation of the surplus arrangement, more than anything else depends the profits of the season.

It is very hard for many to understand that all of the surplus honey is stored in a very short time, and that after bees have once gotten ready to swarm they will do but little work in the supers until after they have done so.

I have said many times that the proper thing to do is to give the bees room according to their *strength*. There is no use to put sections on a weak colony, but it is very important that all strong colonies have surplus room as fast as they can occupy it.

If a few copies of the *Busy Bee* come to you when you are not a subscriber, do not be afraid to read and enjoy them. You will not be asked to pay for what you did not order. We are not in the habit of forcing people to take and pay for our goods whether they order them or not. When the soap maker throws a free sample into your yard, he expects you to do your washing with it without even a formal thanks. You would never know what good soap he made if you did not test it. Just the same with the *Busy Bee* and that is the reason we throw a free sample into your front door occasionally. No, we are not giving the paper away, we are just paying for our own advertising with our own goods. When your time is out your paper will be stopped. If it runs over a few times, no bill will be sent. You only pay for what you order in this establishment.

If the first super is put on just as the clover comes into bloom, and then as this one is partly filled another one is put on, the two supers will be filled



Apiary Building, Trans-Mississippi International Exposition.

THE MANAGERS OF THE EXPOSITION HAVE BEEN VERY LIBERAL TOWARD OUR INDUSTRY IN PUTTING UP A SPECIAL BUILDING FOR IT, AND IT IS TO BE HOPED THAT THE BEE-KEEPERS WILL SHOW THEIR APPRECIATION OF IT.

SHALL WE HAVE THE NEXT MEETING OF THE BEE-KEEPER'S UNION AT OMAHA?

about as quickly as the one would be, if left alone until ready to take off. Many times it will be found profitable to put on the third and fourth super, and in some cases even the fifth. Every bee-keeper should have a lot of extra supers for his hives so he can give all strong colonies room as fast as they need it.

In this connection I want to say to those who have not had much experience with sections that it is time and money wasted to use them without some foundation in them. A small starter will answer the purpose, but the bees are sure to build crosswise in the sections if none at all are used. Then, they will not begin work in the sections if they are used without starters until they are forced to do so and sometimes they will get ready and swarm without entering the sections at all, when, if they had had starters given them they would have gone to work in the surplus arrangement, and perhaps would not have swarmed at all. They would at least have stored considerable surplus honey in the super before doing so, when if they are hived on the old stand, and a few

frames of foundation, or better, old combs, given them, with all the surplus arrangement of the old colony they will go to work in it at once.

You can aid us materially by sending us the names of your friends who keep bees, and we will mail them sample copies of the paper. Then you can ask them to subscribe. We want to get as large a list as possible at every post office, and for that reason have concluded to send the paper to any four names sent us at one time, all to be sent to the same post office, for an even dollar. Get three of your friends to join you and send us one dollar and get the paper for a year. No premiums will be given with this offer, but one of the subscriptions may be a renewal, as this will be an inducement to our friends who want to renew their subscriptions, and get their own paper at half price.

Getting Bees Out of Box-Hives.

I do not believe in the old fashioned method of transferring, but there are some who may find it to their advantage to get their bees into modern hives as rapidly as possible, and

we offer the following as a method that is likely to cause the least loss of bees and trouble. Wait until one of your colonies in a modern hive swarms. After the swarm issues set the hive by the side of and close up to the box-hive out of which you desire to take the bees, with the entrance facing the same way. Let it remain there until the afternoon of the next day, and then take up the box hive and carry it to some other part of the yard. Move the modern hive into the exact spot where the box-hive stood, and after a day or two all of the old bees will be out of the box-hive and in the modern hive. This will give you a good strong colony of bees which will be ready to go to work in the surplus arrangement in a few days, if there is a plentiful honey flow.

There will now be but few bees in the old box-hive, and you can turn the hive up side down, give the bees a good smoking, and you are ready to take off one side of the hive and cut out all of the good combs and fit them into frames. You can do this by laying the frame on the combs and cutting around with a sharp knife so they will fit in all right. They may be held in place with ordinary wrapping twine, and in a few days the bees will have them fastened so the twine can be removed. The combs which are not good can be melted into wax. If the bees are getting plenty of nectar from the flowers this may be done in the open air, but, if not one should have a tent to protect him. However, it is not a good plan to do any transferring unless the bees are busy at work, as it may cause robbing. When you have the combs all in the modern hive, let it set where the old hive stood until after dark, when all of the bees will be on the inside, and this hive may be set by the side of another

box-hive out of which you wish to remove the bees and treated in the same way as before. You will then have another strong colony ready to go to work in the surplus arrangement at once.

If I were doing it, I would make no attempt to get the combs out of the box-hives, but just move them as suggested and throw all of the field bees into the modern hive.

Swarming.

BY the time this number reached our readers the bees will be swarming in some localities, and it is very important that the swarms be properly looked after. It is a great mistake to let a good swarm of bees go to the woods, even though you have as many colonies of bees as you want. If you do not want any more colonies, move the old hive away, and take a hive from which a swarm has issued a day or two before, and place it where the old colony stood, placing the old colony where the other one stood. Cut out all of the queen cells in the hive that first swarmed, before placing it where the other one stood, and then hive your swarm in it, and give them plenty of surplus room at once, and see how fast they will fill up your sections, provided you put starters in them and give them to the bees as fast as they need them. It is the old bees which gather the surplus honey and every time you permit a swarm, which is made up of the old bees and the old queen, to go to the woods you are out many pounds of honey, which is a clear loss, as it could be easily saved by proper manipulation. Every owner of bees should have some drone traps so that he can place one on a colony where there is any prospect of their swarming. It is a very simple thing to hive a swarm with a trap on the hive. After the swarm is in the

air the queen will be found in the trap. Lay the trap to one side, place your hive on the old stand as explained above, and then set the trap near the entrance of the hive, and wait for the bees to come back, which they are sure to do as soon as they find they have no queen. In most cases they will come back without settling at all, so that it will be necessary to work rapidly in order to have every thing ready before they begin to return. As soon as the swarm begins to enter the hive, let the queen out near the entrance to the hive and watch her until she enters the hive and you can then go about your work and have no more trouble. By this method no swarms will ever be lost, for if they come out when you are not on hand, they will soon return and you will find them clustered about the trap and the queen on the inside. You can then release the queen and let her go back into the hive. They are sure to swarm again next day when you can be on hand, and hive them as above.

Drone traps cost 65 cents post paid, but we will send a copy of the *Busy Bee* one year to every one who sends us 65 cents for a trap, and asks for the paper at the time of sending the order.

* * *

We were very late getting out the *Busy Bee* last month, and a number of our friends wrote to know what had become of it. I want to say just here for the information of our subscribers that they need not have any fears about the paper not making its appearance finally during the month, unless it is lost in the mails. Should the time ever come when I find it to my interest to discontinue the publication of this paper, it will not be discontinued without due notice, neither will any subscriber fail to get value received for every penny he has paid us. If there is anything in which the

publisher of this paper takes special pride, it is paying his debts promptly, and he looks upon a subscription for the paper as a debt which he owes his subscribers, and they will be promptly and fully paid according to contract, unless we should be overtaken by some unforeseen and unexpected misfortune.

However, I have no hesitancy in saying that we do not have any occasion to think about winding up the affairs of the *Busy Bee* at present. Our subscription list is growing all the time, we have a good class of advertisements, and think they will find it to their interest to stay with us, and that others of the same kind will join them just as soon as they come to know the value of our paper as an advertising medium.

Plattsmouth, Neb., March 23d, 1898.
Editor Busy Bee:

Your paper comes regularly and I like its make-up and get-up on bee-keeping.

Bees have wintered fairly well in this locality. We have lost four or five in our apiary. Have some two or three that are queenless. Do not know how we shall manage them yet, perhaps unite with other strong colonies as we do not believe in fussing with small colonies. I shall feed a good deal this spring to encourage brood rearing, so as to have laborers for the harvest when it does come. I think that feeding, if done properly will always bring a certain profit, two fold when the harvest comes. The most of our bees are in chaff hives, a hive that we have been using for several years, and from experience we find that it pays to have bees in chaff hives of some kind, though they are expensive at first, though they are the cheapest in the end. We have but little loss in these hives usually.

The prospects for a bountiful harvest are good, the ground being soaked with snow and rain during the past winter.

J. M. YOUNG.

A Field For Knowledge.

OF all branches of business, that of agriculture possesses the widest scope. The field of search is unlimited. One has to deal with a wonderfully diversified subject, when he commences the study of nature as related to farming, for, indeed, the field is a varied one.

Still, how few of those engaged in the calling of farming seem to realize the importance of close study of the subject. Take, for instance, the question of soil, its adaptability to any particular crop or its non-adaptability. What a tedious and expensive course the average farmer is forced to in order to determine a result! He can, if he is a thinking man, try a certain patch with wheat, oats or potatoes, and if he does not succeed in getting a good crop he may charge it to the soil, but how does he know but what the elements or natural conditions have had something to do with the failure of the crop. And if he succeed in producing good results he is no wiser, for he does not even then know what has been the chief cause of his success. Nothing short of an analysis of the soil can settle the question, but he cannot analyze it.

Here is where he fails and where he loses many years of labor trying to determine by rough experimenting which might be easily and satisfactorily determined through a little knowledge that he could easily acquire.

Good learning is as essential upon the farm as in any other line of work. In fact, it is more necessary, for it requires longer time to determine a loss upon the farm than in the counting room.

The day is not far distant when the college graduate will be as common on the farm as he is now in the profes-

sions and when that time arrives we will have successful farmers in the fullest sense of the word.

The farmer of today should see that his children be fitted for the work of farming scientifically, for that is how farming, to be a paying business, must be conducted. The old haphazard way of sowing and trusting to luck for the reaping will not do. We must sow to reap with certainty, or else we will be failures.—*Montana Fruit Grower.*

Moths form one of the most veritable plagues of the house-wife. A simple remedy and preventive is given in the shape of whole cloves, which are to be plentifully placed wherever the insects abound. Oil of cloves dropped on lint or wool would have a like effect.—*Exchange.*

There is laid on our desk a copy of a work on bee-keeping, which is printed in German. It was written by J. F. Eggers of Grand Island, Nebraska. Mr. Eggers is a bee-keeper, and our friends who read German should write him with regard to this book. We will have more to say about it next month.

Pure Food.

Every friend of pure food and drugs should send one dollar to pay for his subscription to PURE FOOD, a 64 page Monthly Magazine, published in the interest of Pure Food and Drugs, by ALEX J. WEDDERBURN, Corresponding Secretary of the National Pure Food and Drug Congress, WASHINGTON, D. C. Sample Copy Free

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Communications

Farwell, Mich., March 24th, 1898.

Editor Busy Bee:

We do not boast of an early spring. We are too far north and too high up to have such things, but like California we have climate and air and lots of it. Forty-five degrees north and twelve hundred feet above the ocean does not warm up very fast nor stay very hot or cold long. Our climate, while not so warm as Texas and the middle states, is more uniform.

Bees have a long rest every winter. They are comparatively dormant from September 30th to March 15th. About the 15th of March we have sun, and it warms up to fifty degrees and the bees get a cleansing flight. They fly about once a week, usually Sundays, until April 15th, when we have mild, clear, sunshiny weather nearly every day.

Bees are kept in a variety of frame hives and wintered in various ways. Many are put in pits and buried, others with no protection, while others are packed in some way. In all these ways they live and do fairly well, probably as well as in other places, either north or south, and average about the same in honey.

The wintering is largely due to the good honey we have. It would be impossible for them to stand our long confinement with poor honey to eat.

My apiary, about one hundred colonies, is, I think, in good order, but as they have had only a few hours on three or four days to fly, I may find later that I have met with a few queen failures.

It is now safe to say that our bees are in good condition; and, as we generally have about the same kind of season, we feel the light of the future upon us.

Our main business has been good and the numerous letters and orders

for new smokers to replace the Bingham smokers that have been in use ten, fifteen and twenty years, encourages us in the belief that our business will not leave us so long as bees are kept and we continue in our time honored course.

T. F. BINGHAM.

Tempe, Arizona.

Editor of Busy Bee:

By some hook or crook the bright December number of your journal is laid on my table away out here in Arizona. It made it seem as though a visitor had called on me, as I was born in St. Louis.

Bee-keeping here is quite different from most other parts of America. However, it is quite similar to that industry in California. I kept bees for years in southern California, with varied success; I failed twice, owing to the extreme drouth. Here, the ten years in which I have kept bees, we have not failed to get a fair crop any year. By confining our industry to the alfalfa fields we are pretty certain of a good yield every year.

When the season happens to be good in southern California, they can secure more honey and get more cash out of it than we can in Arizona, but there are off years there.

Almost all available places here are now occupied by bee-keepers. We work for extracted honey altogether, and sell in Chicago.

With the low prices of honey now ruling, our business is not on a boom. We winter here ~~the~~ the summer stand, giving no special attention to the matter. Our bee-keepers here are incorporated into a body, and move their honey in car-load lots. Our Company have exported thirty-five car loads of honey each year for the last three years, besides the home trade.

Very truly,

GEORGE K. MILLER

Business

Have you a good sewing machine? If not, write us and let us tell you all about ours. It will be money saved, and you will have just as good a machine for service as money can buy.

Are you a subscriber? If not, read this number carefully and see if you do not think it would be an advantage to you to get the paper every month in the year. We want more subscribers, and you need the information. Send us your subscription now before it slips your mind.

Remember that we sell incubators, brooders, and all sorts of poultry supplies, and you can buy them as cheap of us as any place in the United States and just as good.

The Lewis dovetailed hive which we sell is the same exactly as those which are sold by other factories for more money. The Lewis people do as good work as any factory in the United States.

Foundation has advanced three cents per pound since we issued our price list, and patrons should govern themselves accordingly. Do not forget that we sell Dadant's foundation at their prices, both wholesale and retail. Nothing less than 25 lbs., or some multiple of it, sold at wholesale prices.

Business is booming. Should you not get your goods the day you order them, remember that there are 299,000 other bee-keepers, according to statistics, in the United States who may have orders in ahead of you. This is a pointer for you, let your order go where it may. We are trying to keep close up with orders, but we cannot ship any faster than the factory makes them

You need a good bee book. Langstroth on the Honey Bee, latest edition, revised by Dadant, and the *Busy Bee* one year for \$1.25, post paid. This is the price of the book alone, so you practically get the paper for nothing.

We have received a new book on Queen Rearing by Henry Alley, but have only time to mention it this month. It will receive full notice in our Book Review column next month. In the meantime, write to Mr. Alley for full particulars. He is an experienced queen breeder and up to the times.

The *Busy Bee* will be sent THREE MONTHS FREE to anyone who has never taken any bee paper who will send us his name and address on a postal card, and the names and addresses of three people who live on a farm and keep bees. Here is a chance to get a paper *three months for one cent*. Simply say, "I have never taken any bee journal," and then give names and addresses, and sign your own name and address. Write names and addresses plainly. *Show this to your friends who have bees.*

Poultry.

Cheap Foods.

THE cheapest food is the kind that induces the hens to lay. The best of all substances for promoting laying is lean meat or green bone cut fine. Lean meat may cost from five to ten cents per pound while grain may be only one-third as high, but the point to notice is not the cost, but the number of eggs secured. No kind of food is cheap if the hens do not lay, and the object, when purchasing food, should be to get only that from which results are obtained. The profit may be larger when the cost is great, while cheap foods may entail a loss.

—*American Gardening.*



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Where The Fault Is.

Experience has taught that there is no legitimate business which pays better than poultry raising, but it must be conducted with care and skill. Lack of experience, patience, system, and understanding of the amount of work connected with poultry raising are the causes of many failures. The farmer who keeps a strict ledger account of all the returns and expenditures from his poultry is an exception. Many keep no account at all. Such are the ones who insist that poultry does not pay, when the fault lies with themselves, rather than with their much-abused hens.—*The Feather.*

Why Hens Do Not Pay.

When the hens fail to lay there is a reason for it, and often it is quite difficult for their owner to ascertain what it is. In order to rectify the trouble, the cause must be known. If it is in warm weather the hens are on a strike, the trouble is in feeding, for it cannot be attributed to cold. It is a sure indication that hens are overfed when we find soft-shelled eggs. When this difficulty is discovered, the poultryman begins to feed oyster shells and other substances which will provide lime, only to find such remedies failures. The hens are probably too fat, their organs are obstructed, and they cannot produce eggs. In this case the remedy will be to give no feed for several days, and then feed very sparingly. This will reduce the number of eggs, but if it is not adopted the hens will cease to lay altogether and will eventually die off. The sooner we come to the fact that laying

A Record

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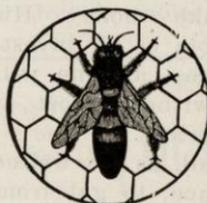
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hens are not fat, the better it will be, and it may require heroic treatment to reduce the fat, but it must be done or there will be no eggs. There is a happy medium between too fat and too thin, which if it can only be reached, will mean many more eggs and just as healthy fowls.—*The Poultry Farmer.*

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No man has a better chance to keep high class poultry than the farmer. He has unlimited range for them, and this is conducive to health and best results in rearing the young. He produces at first cost every necessary food product that goes to keep a flock during the year, and no one who desires to purchase eggs for hatching would ever buy of a breeder who keeps his fowls penned up if he knew where he could get eggs from farm kept fowls.

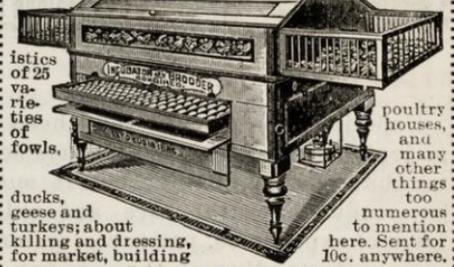
There is just as good a market for high class poultry as there is for poultry for market, and the demand is always good for good stock. The farmer who keeps this kind of poultry has two chances to make money. His flock will be profitable as an investment at market prices, and he will make many sales without effort at much above market prices.

It is no trouble at all, as the writer knows from experience, to get from fifty cents to one dollar a dozen for eggs from high class hens during the hatching season, and even at the smaller price there is an immense profit in the business.

With the better care that is always given to good stock comes a greater return in eggs and meat for the feed used, and here is an additional profit on the transaction.

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ducks, geese and turkeys; about killing and dressing, for market, building

poultry houses, and many other things too numerous to mention here. Sent for 10c. anywhere.

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his own light and does not live up to his opportunities. It does not need fancy houses, elaborate systems of yards nor extraordinary skill in breeding to make a success with fine poultry. Plain, hard common sense, such as is needed to raise good crops and conduct any farm successfully, is better than any number of nice theories which are of no practical value.—*Farmer's Voice.*

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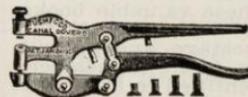
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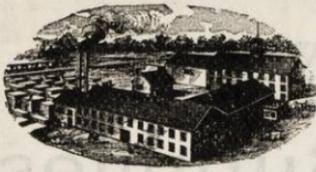
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