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The busy bee. Vol 8, No 5 May, 1897

St. Joseph, Missouri: Rev. Emerson Taylor Abbott, May, 1897

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Vol. 8.

No. 5.

MAY, 1897.



THE BUSY BEE.

Successor to
The Nebraska Bee Keeper.

Emerson Taylor Abbott,
Editor and Proprietor.



Published the 15th
of each Month at

St. Joseph, Mo.



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Minor Interests of Progressive
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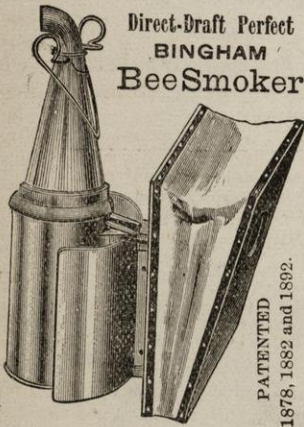
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CHAS. DADANT & SON,

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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 "Smoke 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,

O. W. OSBORN.

With a Bingham Smoker that will hold a quart of sound maple wood the bee-keepers' trials are all over for a long time. Who ever heard of a Bingham Smoker that was so large or did not give perfect satisfaction. The world's most scientific and largest comb honey producers use Bingham Smokers and Knives. The same is true of the world's largest producers of extracted honey. Before buying a smoker or knife hunt up its record and pedigree.

Please mention The Busy Bee.

T. F. BINGHAM, Farwell, Mich.



THE BUSY BEE.

Published Monthly.

Vol. 8, No. 5.

ST. JOSEPH, MO.

May, 1897.

May Morning.

Now the bright morning star, day's har-
binger,

Comes dancing from the east, and leads
with her

The flowery May, who from her green lap
throws

The yellow cowslip and the pale prim-
rose.

Hail, bounteous May! that doth inspire
Mirth and youth and warm desire;

Woods and groves are of thy dressing,
Hill and dale doth boast thy blessing.

Thus we salute thee with our early song,
And welcome thee, and wish thee long.

—Milton.

WHAT IS COMB FOUNDATION?

By C. P. Dadant.

Those of my readers who have pe-
rused any of the late works on bee-cul-
ture, or who have subscribed to some of
the bee-journals ere this are undoubtedly
able to answer the above question.
But those who are new in the business,
or who have seen of bee-culture only
what is said of it in the general publi-
cations devoted to agriculture or to in-
sect study, entomology, are perhaps at a
loss to know what the term means. It
is for this class of readers that I am re-
quested to give a general description of
the uses and benefits of what is com-
monly known as comb foundation.

The combs of the bee-hive are built by
the bees and made of beeswax. This
beeswax is a natural secretion of the
honey-bee, produced, like fat, by eating.
During the height of the honey season,
when the bees' harvest, honey, is plenti-
ful, their honey-sack being constantly
supplied, a portion of the food goes
through a process that changes it into
this fatty substance and the wax ex-
udes from under the rings of their
abdomen in the shape of light scales.
It is evident, that, to a certain extent,

the production of this wax or comb is
voluntary on their part. For instance,
if a comb breaks down in the hive, at a
time of the year when there is no hon-
ey in the field, the bees may, at their
discretion, rebuild this comb; and they
usually do it, if they have a sufficient
quantity of honey in store to
provide for it. When a swarm
is harvested, if the hive in which it is
placed is empty, they evidently
bend all their energies towards the pro-
duction of the combs, which are prac-
tically the furniture of their home,
since they are used by them as pan-
tries to hold the food, honey and pol-
len, and as cradles for the young bees.
When the harvest is good, it takes but
a few days to build these combs. On
the other hand, when a swarm has been
provided with a hive full of comb al-
ready built, it turns its efforts entirely
to the harvesting of honey, using what
beeswax is involuntarily produced, dur-
ing the honey flow, for repairing the
combs, or filling corners and empty
spaces. None of this wax is ever wast-
ed, in normal circumstances, for they
are very industrious and seem to know
how expensive it is to them.

It was not until the beginning of this
century that it was ascertained that
the production of a single pound of
comb requires the consumption by the
bees, of at least ten pounds of honey.
This shows the analogy of comb with
the fat of animals, for everybody knows
how expensive it is to produce a pound
of fat out of the grain. Thus, if honey
is worth ten cents per pound, the cost
of the combs to the bees will amount
to fully a dollar's worth of honey for
each pound of comb produced. The
commercial value of beeswax when ren-
dered and put upon the market, being

ference between its cost and its cash only about 25 cents per pound, the difference represents the saving that may be effected by returning it to the bees in a shape in which they may be able to utilize it for comb-building again.

Hence the invention of comb foundation, or the production of a sheet of beeswax with the shape of the indentation of the base of the honey-comb.

The saving that is made by the use of comb foundation is but one of the advantages of using this new product. There are other advantages of great value to the bee keeper derived from its use in the beehive.

The bee-keeper of today is not satisfied with the old method of cutting down bee-trees and gathering the honey, in broken pieces, mixed with rotten wood, bee-bread and dead bees, in a tub, for sale at the next village. He must have his combs built in small section boxes, and a single pound of honey in each section, clear, clean and bright, to be placed in a glass box, on the counter of the fancy grocery to invite the purchaser by its attractive appearance. To secure a straight comb in this section, or in the frame in which the bees breed, so as to have it all within his reach without breakage and leaking was for a long time a problem. This problem was solved by comb foundation. A narrow strip of it, be it ever so small, placed at the top of a section or of a frame, secures a straight comb, smooth as a board, every time. We kept bees on a large scale before the invention of comb foundation, and can assure the reader, that if there had been no other advantage, to this new product, than that of securing straight combs every time, this would have been sufficient to insure the success of the invention. But this is not all yet. There is another great advantage to this wonderful product.

In a state of nature, the honey bees living in separate colonies raise a certain number of drones for the fertilization of the queens. The queen mates but once, on the wing, and in her bridal flight must find a drone, or the colony

is doomed to perish. So nature has provided for this by causing each hive of bees to rear several thousand drones, that the young queens may not fail to find a mate readily. Under domestication, a large number of hives being kept in one location, the drones of a single hive become sufficient for all the queens that may be reared during the season. The drone, as every one knows, is an idle fellow, who does nothing. As Butler said in 1609, "He worketh not at all, either at home or abroad, and yet spendeth as much as two laborers." We must therefore do away with the surplus production of these worthless insects, and the only way to do it, is to cut out the combs in which they may be raised, drone combs, which have larger cells than the combs intended to rear worker bees, the cells measuring four to the inch, while the worker cells measure five in the same space. If we cut out these combs without replacing them by worker combs, the bees will be sure to rebuild the same kind and we will have our trouble for nothing. But with the help of comb foundation, which is made for worker cells, each hive may be provided with a sheet that will furnish room for four or five thousand workers, instead of raising in the same space and with the same expense about two-thirds of this number of idle drones, that will do nothing but eat after they are hatched.

As a matter of course a sufficient number of drone combs should be preserved in an apiary to rear all the drones that are needed to fertilize the young queens, and these may be left in the best colonies so as to breed from the best stock. But in every hive there are still left a number of cells in little corners and unnoticed places sufficient to raise more drones than are really needed.

In the next article I will explain how comb foundation was invented, by whom, and give a closer description of it.

Hamilton III.

Mr. Dadant puts the quantity of honey consumed in order to produce a pound of wax very low. Some have estimated it as high as twenty pounds

The correct amount is perhaps somewhere between ten and twenty pounds. I would not encourage the use of too small strips of foundation as they have failed sometimes to give perfect satisfaction.—Editor.

USE OF THE SMOKERS.

By T. F. Bingham.

While the fact that smoke has been used for an almost limitless period and is now the most valued hand maid of the practical and scientific bee keeper, probably not fifty per cent of those using smoke in their apiaries understand fully and realize perfectly that wood smoke merely frightens bees. It does not stupify them or make them quiet by a direct influence upon their nervous systems.

Nature has, in her universal laws, established in all animals and insects a sense of fear. With this fear is coupled the instinct of self-preservation. This instinct of self-preservation shows itself in bees in three ways, viz: to fly or run, to sting and to load their honey sacks with honey, as if to take a long journey in a flowerless country, and amongst strangers.

The influence of smoke upon bees in a general sense, in the apiary, is soothing; it makes them respectful and kind in their general demeanor. It is magnetic. By it they recognize and respect their master, who, of course, does not abuse them, or needlessly frighten his noble subjects.

This instinct to fill their honey sacks when frightened impells them to return to their hive to get honey, also to seek the open cells of honey when a hive is opened instead of rushing out into the air pell mell. Without this instinct large apiaries could not be managed. No county would be large enough for 100 colonies in one place. It will be seen that smoke is of value in the apiary in a general way, which has made a portable smudge of value—as in taking a bee tree straw is burned. A portable smudge is of special importance to bee keepers,

not only important, but absolutely necessary to them in their management. The bee keeper could not preserve peace without one. His own family, also all his neighbors, would be in constant danger. From the above it will be understood that the main object in using smoke is to frighten the bees so that they will go to the open cells of honey instead of for you. To open a hive very little smoke need be used. Blow a little puff near the entrance to prevent the few near it from rushing out. Then with a sharp screw driver pry up the cover just enough so a little smoke can be blown in to turn their heads to the open cells of honey. Now, while the bees are retreating, carefully raise the cover, keeping your smoker ready to quiet any bee that may show defensive designs. A light, slow puff across the top of the mass of bees will divest them of any disposition to fly out of the hive, though it may be wide open.

Much has been written regarding the fuel for smokers. With a smoker that will burn anything, the question of ease of preparing it will be the main feature with the inexperienced. There is a difference, however, in the condition and kind of fuel. The largest bee keepers use, and have found sound dry maple the most convenient and best for the smoker. The air passes directly up through the split wood, and very little steam condenses on the smoker, while shavings and rotten wood, steam and rust the smoker. A little perfectly dry rotten wood, fired with a match and dropped into the smoker before putting in the pieces of hard wood will, with a little puffing, start a good fire. Some fine rotten wood should always be kept where it can be had quickly in case of sudden emergency, as it can be used instantly when time is of great value.

About the year 1860 Moses Quinby made what was regarded as a real improvement in a portable bee smoker apparatus, or bee smokers, which was highly prized by bee-keepers, although it did not meet their wants. I would go out sometimes when most needed, and was

particular about the fuel, rotten wood being a partial necessity in keeping fire in it. Nineteen years ago the Bingham direct draft bellows bee smoker was invented, and offered to bee-keepers. It took the bee-keeping world by storm. It would burn everything even dry stove wood, and best of all never go out. As a result of the introduction of a good smoker, bee-keeping, comparatively speaking, became a pastime, and large apiaries harmless and productive. Horses and families were safe, and the student and farmer boy became delighted with his bees, which before he had so admired and dreaded.

Farwell, Mich.

Chaff and Single-Walled Hives for Wintering.

Ed Jolley has the following to say upon the subject in an article in *The American Bee Keeper*:

"I consider it not warmth but dryness that is the absolute requisite to successful wintering, and I argue that bees can be kept dryer in a single walled hive with a good top packing than they can in the best chaff hive ever made. I have wintered my bees on the summer stands in single walled hives, with extra heavy packing on top of the frames, for a number of years, and have had the best possible results. My bees always come out in the spring as strong or stronger than my neighbors' bees that are wintered in chaff hives or in the cellar. My bees are always built up strong enough to swarm as soon as any bees around here, and are ready for the honey flow when it comes, and get as much honey as anybody's bees. My hives only cost me about half as much and are not nearly so unwieldy and cumbersome as the chaff hive.

I never lost a colony of bees in a single walled hive since I have kept them that way until this winter. I have lost seven up to date, but I can attribute the loss to other causes than the single walled hive. It goes a little against the grain to tell it, but three out of seven starved to death. I lost the other four as the result of the covers blowing off

and the bees getting a good soaking rain in February, when I was away from home. It turned suddenly and I lost them."

There can be no doubt but Mr. Jolley's position is in the main correct. More bees die in the winter from dampness and lack of good food in the proper place, directly above the cluster, than from all other causes combined.

A Few Strong Colonies Better Than Many Weak Ones.

One of the difficult things for the novice in bee-keeping to learn is that ten strong colonies will store more honey than twenty weak ones. There is an anxiety for large numbers, and each colony is counted one, no matter how feeble it may be. So the inexperienced is often delighted at getting two, three, or even four or five swarms from a single colony, notwithstanding the fact that the last two or three swarms contain only a handful of bees. They are sure to die before the Winter is over, and then he decides that he doesn't care for such very weak colonies, but still clings to the thought that one strong enough to live through is all right.

Many times, however, it is true economy to lessen the number, even with the view of having the largest number possible in the succeeding Fall. Suppose, for instance, there are four weak colonies in the Spring, each one having enough bees to fairly cover two combs, unite two of them, and leave the other two without uniting. You now have only three colonies instead of four, and yet you may be better off; for the one colony, with bees to cover four combs, will go right on increasing in strength and by the time the white clover harvest is fairly under way it will be strong enough to give you a rousing swarm, and you will now have two strong colonies for it, while the two weaklings have only just begun fairly to build up. They stood still, not showing any increase in number for a long time, evidently needing all the strength they had to keep up existence and make good the loss of the dying bees by the young bees raised.

If, instead of trying to increase, the effort be to get all the honey possible, supposing neither colony offers to swarm, the difference is fully as noticeable, if not more so. The united colony will have more bees than there are in both the others. It is easy to see that it will store more surplus. But, if you've had no experience in the matter, it may be hard for you to believe how much more.

The above has been going the rounds of the papers for some time, but it can not be repeated too often. If bee-keepers would adopt the plan of hiving all swarms on the old stand, they would not be troubled with so many weak swarms.

LETTERS FROM THE FIELD.

Bee Keeping in Texas.

Dear Sir:—I will say that I accept your invitation to write up the prospects of a honey crop in the Lone Star state with pleasure. The fairest prospects sometimes terminate in a complete failure in this country. The cause is due to the sudden changes in the weather. The raton and blackberries which are our only dependence for a spring flow were a failure on account of dry, north winds, and cold nights. These vines bloomed in great profusion, and could we have had warm, still weather the flow from them would have no doubt been very great. If I could make a weather forecast that would be a success, I then could state very accurately whether we were going to have a good honey flow or not, but this I can not do. Neither do I believe any one else can, for Texas is a privileged character. Nature may perform her part nobly, which she generally does (but Texas never). If we may judge from the conditions of the honey producing plants, we may say that the prospects were never better. However, they may bloom in vain, which they frequently do, and the bees go to starvation.

I am now inclined to the belief that Texas is not adapted to honey production. In the spring the weather is ex-

ceedingly uncertain and it turns hot in June, usually about the 15th, and then it is so hot that the bees seem to lose their energy. They will cluster on the shady side of a hive, some times under the stand. They will do this when the flowers are running over with nectar. There is a vine here we call the cowache. It begins blooming in June and continues to August 15. The flowers open in the hot sun, the hotter the day the greater the yield. You can ride along the road and see the nectar shining in the flowers, and it is only now and then you can see a bee on them, even when the range is considerably over stocked with bees. The honey yielded by this vine is of the finest grade of Texas honey.

These dry, hot summer days not only affect the bees but all animal nature seems to wither under their intense heat. I trust that those who read this letter will not come to the conclusion that I am a chronic kicker. I am not that, but that both sides should be shown up is my earnest desire. I must confess that I felt very much discouraged when I spent some of my best bee-keeping energy in the production of comb honey to no purpose. After all of my work, I am of the opinion that comb honey production can not be made to pay here, on account of the laziness of the bees or slowness of the flow. In conclusion I will say that April 5 we had a perfect shower of nectar from Horse-mint and Nigger Head. We had been feeding and many of the 300 colonies we have located at Cameron were near starvation. To-day, the 6th, a north wind is blowing and bees are flying but little. I hope that what I have said will not dissuade any one from moving to Texas who has been contemplating doing so. The truth ought to be told.

Yours truly,
C. B. BANKSTON.
Cameron, Texas, May 5, 1897.

John G. Corey spent \$14 for a pump and windmill, and \$4 for a watering-trough for his bees, and thinks he will save it in bees that would be lost in going long distances for water.

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.

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COMMUNICATIONS.

The Editor solicits communications on the subjects treated in this paper. All such will receive careful attention and be given a place in the columns of the paper, if the Editor deems them of sufficient interest to the general public to warrant their insertion. Write on one side of the paper only, as plainly as you can. If you have something of real interest to communicate, do not refrain from writing simply because you think you may not be able to clothe your thoughts in proper language. Tell what you know the best you can, and the Editor will look after the rest.

EDITORIAL.**Aim and Purpose.**

While the aim and purpose of the Busy Bee will be to advance the interests of apiculture on the farm and in small villages, yet it will not be confined exclusively to this one branch of what I call the minor industries of the farm. I shall not hesitate to insert articles on poultry, the garden, flowers, the home, or any other branch of modern and progressive agriculture. The ed-

itor of this paper, as will be seen in another column, believes that the elementary principles of agriculture should be taught in all of the public schools, especially in rural districts, and he will find space for articles bearing on this subject until it becomes a part of the organic law of every state where the paper circulates.

Believing, as the editor does, that the massing of so many people together in large cities is one of the mistakes of this age, and that there is no more honorable and elevating occupation than progressive and intelligent agriculture, he will endeavor in every number of the paper to magnify and exalt the calling of all of those who are faithfully, and to the best of their ability, following any rural pursuit in order to obtain a living for themselves and those dependent upon them. I may say further that I shall write and procure articles from others largely in the interest of beginners. The Busy Bee will not take it for granted that the reader knows all about the subject, but will deal largely with elementary principles.

Notice.

I shall mail a copy of the paper to all of those who have ever been subscribers to the NEBRASKA BEE KEEPER. If you are pleased with the paper and wish me to continue to send it to you, send me 25c before the fifteenth of June and the paper will be sent you the rest of the year. If I do not hear from you, I shall conclude that you do not want the paper, and it will be stopped. I have no appeal to make to any one on the ground of "helping a good cause." If you think the paper worth the money asked for it, remit at once before you

forget it; if it is not worth the amount of the subscription price, I know of no other ground on which to appeal to its readers to become regular subscribers. I shall make it the best paper I know how, and offer it to the public on its merits. If they fail to buy, I shall conclude that it is because they are not in want of that kind of reading matter, and not on account of a lack of enthusiasm for a "good cause," so called. In other words I offer you the paper just as the farmer offers his products, and ask you to patronize it on the ground of its real value to its readers. I have but little sympathy with that idea which is set forth by many publishers that their papers should be supported because they are in a certain sense public benefactors. The publishing of any kind of a periodical is a private enterprise, and has no other claim upon the community at large than that of real value, because it is worth the money asked for it. The publisher of this paper believes it will be worth all he asks for it to anyone engaged in any kind of rural pursuits, and on that ground he makes a special appeal to each reader to have his or her name entered as a regular subscriber. Taking this copy as a fair sample of what the paper will be in the future, if you **AGREE WITH HIM, SEND IN YOUR SUBSCRIPTION AT ONCE.**

Comb Foundation.

As this paper is intended to answer a great many questions which are naturally asked by the beginner or the bee-keeper who knows but little about modern bee-keeping, I have secured the services of one of the leading foundation makers in the United States to write a series of articles upon the subject of comb foundation. My suggestions to Mr.

Dadant were to write so that anyone of ordinary intelligence would understand him fully, even though he had never seen any comb foundation. The subject will be farther considered in future numbers of the paper, and I would suggest that the copies be carefully preserved, especially by those who know but little about the use and advantages of foundation, as the subject matter will be found valuable for future reference.

Food Adulteration.

The adulteration of food products has increased to such an alarming extent during the last few years, that there is now scarcely an article of human consumption that is not more or less adulterated. There has been a great deal of talk about the subject of the adulteration of honey in late numbers of the bee papers. Some of the suggestions offered have been wise and some from the standpoint of the writer, otherwise. Prof. Wiley, the U. S. chemist, is reported to have said in a lecture delivered not long ago, that out of 500 samples of honey bought in different parts of the United States, at least two-thirds of them were adulterated. Now, I do not like to call in question a statement which has such eminent backing, but I am inclined to think there is some mistake about this. Either the Professor has been wrongly reported or else there is some radical error in his method of analysis. To tell the plain truth about the matter, I am inclined to think that there is a great deal more being said about the adulteration of honey than the facts warrant. However, admitting this to be a fact, adulteration has become a glaring evil and a bold and wilful fraud perpetrated on

the people of the country every day, and something should be done to stop it. I am opposed to the enactment of laws to protect any special industry, but I think every lover of fair play should do all in his power to secure the enactment of laws which will make it a criminal offense to adulterate or wrongly label any food product.

There is such a law in the state of Missouri but it is not enforced, and therefore needs some revision which will cause it to cease to be a "dead letter." It now reads, "Every person who shall fraudulently adulterate, for the purpose of sale, anything intended for food or drink, or any drugs or medicine shall be deemed guilty of a misdemeanor." Article 8, section 3879, Revised Statutes of Missouri. If this section were properly enforced it would do away with a great deal of this evil in our state.

A bill was introduced in the Illinois senate a short time ago which is intended to cover the ground a little more thoroughly. It makes it a misdemeanor "to sell, or offer to sell, any flour, meal, canned fruits, canned vegetables, or any other article designed for food, having stamped, printed, or written upon the sack, can or covering, any other than the true name of the contents, or of the manufacturer." This, in my opinion, has the true ring, there is no use, however, to specify any article of food, but enact one general law which will cover all food, and force people to label things just what they are. Then, if people want to buy mixtures instead of the pure articles, they have a perfect right to do so.

BOOK REVIEW.

(Any book mentioned in this column may be ordered through us.)

In this age of scientific investigation every intelligent and progressive man

looks upon books treating or bearing on the pursuit in which he is engaged as an essential part of his tools. A part, too, which he can ill afford to dispense with, and, therefore, he is as much interested in knowing what books of value there are relating to his occupation as he is in knowing what new tools have been invented to lighten and increase the efficiency of his work. I will, therefore, need to offer no apology for occupying a part of the space of this paper with the review of such books as I believe will be instructive and helpful to those who are engaged in rural pursuits.

Note to Publishers.—You are invited to mail to The Busy Bee copies of any books of interest to those engaged in rural pursuits, and they will receive proper notice in this column. All books received will be given some notice, but the length of the notice will depend entirely on the editor's ideas of their value to his readers. Please mark the retail price on the fly leaf of all books, and if possible send a circular treating of them.

The American Fruit Culturist, by Thomas, revised by Wm. S. Wood; price \$2.50. Published by Wm. Wood and Co., N. Y. This is a new edition of an old standard work, which has been thoroughly revised and brought down to date. It contains about 800 pages and is profusely illustrated, and every page is packed with valuable information to the farmer and fruit grower. This is just such a book as should be put in the hands of every young man and woman growing up on a farm. I do not mean to say by this that the book is written for young people, for the old and experienced fruit grower will find use for this handy dictionary of his business almost every day. Specimen pages and prospectus may be had for the asking, and my advice to those interested is to send for a copy.

American Fancier's Poultry Book, by George E. Howard, published by A. E. Blunck, Johnstown, N. Y. Price 50 cents, bound in paper. This is a late work on poultry, well illus-

rated and full of practical information. It discusses in a brief, practical and interesting way every phase of the poultry business, and the illustrations are very much better than those usually found in such books. Every one who raises even a small quantity of poultry should have a handy manual on the subject, and the low price places this within the reach of those whose means are limited.

The Food of Plants, by A. P. Laurie, and Garden Flowers, by Wright, are two little hand books, neatly bound, which sell for 25 cents each, published by MacMillan & Co., New York and London. They are not late publications, but they are none the less valuable. The latter book will be found helpful to every grower of garden flowers, and the first one would not be a bad book to use as a foundation for brief lessons on plant growth in the public schools. The time has gone by when farmers' children, or any other children for that matter, should be permitted to grow up without any knowledge of how plants grow, how they gather their food from the soil and air, and the kind of soil best adapted to their growth. Our system of education needs to be given a more practical turn; we should study more about what is and less about what has been. It is about time that farmers' children be taught something about the possible means of securing a livelihood, and less about the islands and rivers of distant climes, in which they have but little interest, and a knowledge of which will be of but little practical utility to them. When the farmers of the land understand this as they should there will be provisions in the laws of every state in the union for the teaching of the elementary principles of agriculture in the public schools. I shall have more to say on this subject in the future.

The "St. Joe" is the best beehive made. Write for circular.

E. T. ABBOTT,
St. Joseph, Mo.

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.

Two Thoughts.

When I reflect how small a place I fill
In this great teeming world of laborers,
How little I can do with strongest will,
How marred that little by most hateful
blurs,

The fancy overwhelms me, and deters
My soul from putting forth so poor a
skill;

Let me be counted with those worshippers
Who lie before God's altar, and are still.
But then I think (for healthier moments
come),

This power of will, this natural force of
hand,—

What do they mean, if working be not
wise?

Forbear to weigh thy words, O Soul!
Arise,

And join thee to that nobler, sturdier
band

Whose worship is not idle, fruitless,
dumb.

—Edward Cracroft Lefroy, in Christian
Register.

This is the woman's era. Everything is going her way. She is fairly pushed to the front, whether she will or not. All avenues are opening to her feet. She occupies the pulpit, prescribes pills and physic, pleads in the courts, enters into business, manages farms and ranches, and is found in many other fields of labor formerly considered suitable for men only. Colorado has even gone so far as to introduce a bill into the legislature making her eligible to military service. There is no longer any cause for an active, ambitious woman to murmur at her sex and wish herself a man, because of his wider opportunities; but from present indications it seems as though the time may come when the boys will be regretting that they were not born girls.

This widening of the horizon for women must affect all women in some degree, but it will not change the occupa-

tion of the great majority. The mothers of the race ought to be the best fitted to rear the children. There is no higher or holier work than this. With the care of the children is almost inseparably connected the care of the home, not from custom, but from natural association.

The house mothers and housekeepers must consider many things in their round of duties that are of special interest only to those similarly situated. To such we dedicate this department, and with your help, friends and sisters, we hope to make it both interesting and profitable.

SOME USES FOR COAL OIL.

Shave one-half bar of common soap into two quarts of water; add one tablespoonful coal oil, and let the mixture boil from three to five minutes. Cool and set away for future use. A teaspoonful of this preparation in a washpan of water will cleanse windows, lamp chimneys, paint and the like beautifully, and is much more pleasant to use than a few drops of oil alone in the water, as recommended by some. A little stronger solution will discourage plant lice and scale on house plants to a great extent, and repeated thorough washings of the infested plant will cause the little pest to disappear.

Coal oil will also banish the crawling, creeping horror that infests our—no not ours, some people's bedsteads. An atomizer is the best to use for this purpose, as it will send the liquid into every crack and crevice, but in the absence of that utensil, a small-necked bottle will do. The little insects are not at all particular as to the method of application. They give up the ghost with promptness and dispatch when the oil penetrates their lair, no matter what the means used, but there is likely to be a waste of fluid and grease spots on the floor, and besides, the odor may disturb the slumbers of the occupants if used too lavishly, and the less that can be used effectually the better.

HOW TO REST.

To understand how to rest is of more importance than to know how to work. The latter can be learned easily; the former it takes years to learn, and some people never learn the art of resting. It is simply a change of scenes and activities. Loafing may not be resting. Sleeping is not always resting. Sitting down for days with nothing to do is not restful. A change is needed to bring into play a different set of faculties and to turn the life into a new channel. The man who works hard finds his best rest in playing hard. The man who is burdened with care, finds relief in something that is active, yet free from responsibility. Above all, keep good natured and don't abuse your best friend, the stomach.—Selected.

Getting a Start With Bees.

The best time in the year to begin bee keeping is in the spring, and every farmer who has none should consider the feasibility of securing one or two colonies of bees. I say one or two, for a man who has not had any experience with bees should never purchase more than one or two colonies to begin with. These should be bought as near home as possible, and it will be better if they are in a modern hanging frame hive. The best time to buy is just as the fruit begins to bloom, but it is not too late yet. The hive is not likely to be too full of honey for easy and safe movement at this season of the year, and all colonies that have lived up to this time, and are strong, will be able to gather enough to carry them through until the main honey flow begins. It is better to pay a fair price for one good, strong colony than to buy two weak ones because they are cheap. Examine the colony about the middle of the day when it is clear and warm. If you find them busy at work, and an abundance of bees going in and out, you may safely conclude that that colony is a good one to buy.

Having secured a good colony of bees, get a good bee book, a cheap smoker,

and some kind of a veil to protect the face, and you are ready to learn something of the bee business. I said above that it was best to buy bees in a modern hive, but this is not absolutely necessary. It is better to purchase a good strong colony in an old fashioned box hive near home than to send off a long distance to get a colony in a modern hive. Having a good colony in any kind of a hive, one can soon have all the bees he wants in the kind of hive he prefers, by proceeding as follows: Secure a modern hive and get it ready for occupancy, and when the colony swarms hive the swarm in the new hive, and place it on the old stand, moving the old hive to a new location.

This will give you a good strong colony in a modern hive. To get the best results, the frames in the brood chamber should be filled with comb foundation, and the sections in the super should have starters in them. If your hive has only eight frames, and I prefer them to a ten-frame hive, it will take eight sheets of foundation to fill the brood chamber. These will cost about 70 cents, but it will be money well invested. If the season proves a good one, the first swarm will probably cast another swarm, which should be hived on the old stand the same as the first swarm, and all of the surplus arrangement on the hive from which the swarm issues should be given to the new swarm.

If the bees in the box hive are kept confined to as small a space as possible, and not given any surplus arrangement, there will probably be a second swarm from the old colony, which should be treated the same as the first swarm. As soon as the sections in the first super are partly filled with honey, lift this super up and put another under it, which has been previously prepared with sections and starters the same as the first. This may be repeated, always putting the new super at the bottom. By manipulating a colony of bees in this way one may secure a hundred pounds of fine comb honey from them in a single season, if it proves to be a good one,

and get at least one good swarm from it, which will secure plenty of honey to winter on.

Permit me to suggest, in conclusion, that you do not need to buy every trap you see advertised by over-anxious supply dealers in order to secure such results. EMERSON TAYLOR ABBOT.

St. Joseph, Mo.

The United States Bee-Keepers Union.

The object of this society, according to article 2 of the constitution, is to "promote and protect the interests of its members; to defend them in their lawful rights; to enforce laws against the adulteration of honey; to prosecute dishonest honey commission men, and to advance the pursuit of bee-culture in general."

The officers of this union are: G. W. W. York, president, Chicago, Ill.; Dr. A. B. Mason, secretary, Station B, Toledo, Ohio; Hon. Eugene Secor, general manager and treasurer. Directors, E. R. Root, Medina, Ohio; Emerson Taylor Abbott, St. Joseph, Mo.; C. P. Dabant, Hamilton, Ia.; E. Whitcomb, Friend, Neb.; Dr. C. E. Miller, Marengo, Ill.; W. J. Hutchinson, Flint, Mich.; Hon. Eugene Secor, Forest City, Iowa. The membership fee is \$1.00 per year, and every bee keeper who desires the help of the union should become a member at once.

PREMIUM LIST AND SPECIAL OFFERS.

The New Improved Peerless.

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.

This machine is in every respect the equal of machines sold by agents at from \$50 to \$65. Why pay such prices when you can get a first-class machine direct from the factory for about one-third what agents will charge?

All of the usual attachments will be found with the Peerless, and in addition

a box of extra, fine nickel-plated attachments. It is warranted by the manufacturers for ten years.

Price, for a five-drawer, finely finished machine, shipped direct from the factory in Chicago, only \$18.00, including The Busy Bee for one year. This is lower than the machine can be had in any other way, and it will not be furnished except in connection with the Busy Bee for one year.

The machine will be given free to any one sending a club of 60 new subscribers for one year, with \$30 to pay for the same.

Langstroth on the Honey Bee.

This is one of the best bee-books in existence. It is well bound in cloth, printed on fine paper, and contains about 550 pages. It is filled with useful and practical information, and is finely illustrated. It has been thoroughly revised by those noted and successful apiarists, Charles Dadant & Son, and formerly sold for \$2.00. The price now is only \$1.25. It will be sent postpaid with the Busy Bee for one year, for \$1.40, or it will be given free to anyone sending in a club of four new subscribers for one year, with \$2.00 to pay for the same. Here is a chance to get a bee book for a very little effort. To the first one from any city in the United States sending in a club of four new subscribers for a copy of Langstroth with \$2.00, I will give an extra copy of the paper free for one year, in addition to the book. Here is a chance to get your own paper free, if you will only get a move on you, and be the first one from your place to respond. I will send the extra paper to the party whose letter I happen to open first, should more than one from the same place come in the same day. Do not delay if you want to be first.

Two Papers for the Price of One.

The St. Joseph Weekly Herald and the Busy Bee will both be sent one year for the price of The Herald, \$1.00. The Herald is a family weekly paper, giving all the news of the day and in addition it has a number of special departments

which can not fail to prove interesting and helpful to every member of the family. It is Republican in politics, but this subject is not pressed to the exclusion of others. If you want to see a sample copy, address Weekly Herald, St. Joseph, Mo.

The Art of Incubation and Brooding.

By E. and C. Von Culin. Every poultry raiser should know something about the laws of incubation, and this new book on the subject treats the matter fully. It is bound in cloth and contains about fifty illustrations. The price of the book is \$1.00, but I will send the Busy Bee one year and the book both for \$1.00, or the book will be given free for a club of four new subscribers.

Liberal Cash Commissions.

I will pay liberal cash commissions to anyone who will act as agent for The Busy Bee. Write for terms and sample copies.

ADVERTISEMENTS.

Advertisements of a proper character will be inserted at the following rates:

	One Month.	Three Months.	Six Months.	One Year.
1 Inch ...	\$.70	\$ 1.75	\$ 3.25	\$ 6.50
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1 Page ...	7.50	20.00	39.00	75.00

Reading notices, 10 cents per line each issue. Special Position one-fourth more than above rates.

The publisher cannot undertake to be responsible for the acts of any of the advertisers, but he will not knowingly admit any fraudulent advertisement, and will immediately drop the ad. of any person or firm failing to deal fairly with the public.

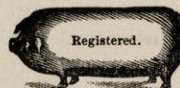
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Ads. in the Special Column will be inserted at the rate of 1c per word for each word, figure or character. No ad. taken for less than 15c. Ads. in this department must not exceed five lines.

AGENTS.—Can make good money soliciting subscriptions for the Busy Bee. Write for terms.

ENVELOPES AND LETTER HEADS.

—The publisher of the Busy Bee can furnish you printed envelopes, letter heads, bills, etc., very cheap. Write for estimates.



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"My 8-year old girl can start and speed it to 50 turns"
S. N. SHERMAN.
Meckville, Pa., Jan. 9, 1897.

"It is is only good exercise for it almost runs itself," say Fannie and Nora Hartzler, aged 15 and 13 respectively.
Bellevontaine, Ohio, July 1, '96.
"My boy, 11 years old, takes all care of it now."

JOHN L. BARTER,
Sac City, Iowa, Aug. 26, 1896.

"My boy of 7 frequently teases to turn the crank, it runs so easily."
J. H. BROWN,
Ag'l Ed. Michigan Farmer,
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W. H. FETHEROLF,
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And will win you for a steady customer if you will only buy ours on trial. Our large Catalog will cost you 5 cents, and give you \$100 worth of information on Poultry and Incubators and the money there is in the business. Plans for Brooders, Houses, etc., 25 cents.

N. B. Send us the names of three persons interested in Poultry and 25 cents, and we will send you "The Bicycle; its Care and Repair," a book of 180 subjects and 80 illustrations, worth \$5 to any bicycle rider.

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