



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The busy bee. Vol 9, No 4 April, 1898

St. Joseph, Missouri: Rev. Emerson Taylor Abbott, April, 1898

<https://digital.library.wisc.edu/1711.dl/FLZUYIBMODAD48K>

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

For information on re-use see:

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

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

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

VOL. 9.

APRIL, 1898

NO. 4.

PUBLISHED THE FIFTEENTH OF EACH MONTH.

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.

20th Year Dadant's Foundation. 20th Year

Why Does It Sell So Well?

Because it has always given better satisfaction than any other.
Because **IN 20 YEARS** there have not been any complaints, but thousands of compliments.

We Guarantee Satisfaction.

What more can anybody do? **Beauty, Purity, Firmness. No Sagging. No Loss. Patent Weed Process of Sheeting.**

Send Name for Our Catalog, Samples of Foundation and Veil Material. We sell the best Veils, cotton or silk.

Bee-Keepers' Supplies of All Kinds.

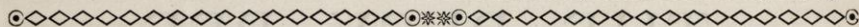
LANGSTROTH ON THE HONEY-BEE--Revised,

The Classic in Bee-Culture—Price, \$1.25, by Mail.

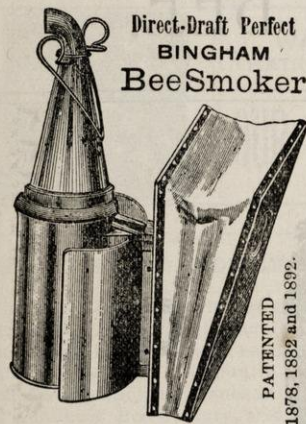
CHAS. DADANT & SON,

Please mention The Busy Bee.

HAMILTON, Hancock Co., ILL.



PRICES OF Bingham Perfect Bee-Smokers and Honey Knives.



Direct-Draft Perfect
BINGHAM
Bee Smoker

PATENTED
1878, 1882 and 1892.

| | largest smok- er made | per doz. | each. |
|---------------|--------------------------|---------------|--------|
| Smoke Engine | 4 in. stove | \$13.00—Mail. | \$1.50 |
| Do tor | 3½ " " | 9.00— | 1.11 |
| Conqueror | 3 " " | 6.50— | 1.00 |
| Large | 2½ " " | 5.00— | .90 |
| Plain | 2 " " | 4.75— | .70 |
| Little Wonder | 2 " wt. 10 oz | 4.50— | .60 |
| Honey Knife | | 6.00— | .80 |

All Bingham Smokers are stamped on the metal, patented, 1878—1892—Knives B. & H. The four larger sizes have extra wide shields and double coiled steel wire handles. These SHIELDS and HANDLES are an AMAZING COMFORT—always cool and clean. No more suttu nor burnt fingers. The Plain and Little Wonder have narrow shields and wire handles. All Bingham Smokers have all the new improvement, viz: Direct Draft, Movable Bent Cap, Wire Handles, Inverted Bellows, and are ABSOLUTELY PERFECT.

☞ Fifteen years for a dollar. One-half a cent a month.



Cuba, Kansas, Jan. 27, '896
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,

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. 9.

APRIL, 1898.

No. 4

Spraying and Bees.

BY C. P. DADANT.

HERE is no doubt that bees may be injured by poisonous spray scattered over the bloom of fruit trees, as some of this poison may mix with the honey in the calyx of the flower and thereby poison the nectar. There would even be some possibility that enough poisoned nectar be brought to the hive in this way to create a danger for the apiarist if he consumed any of this honey himself.

But there is no necessity of spraying fruit trees during bloom. The horticulturists do not advise it, and the purposes of spraying are not correctly served by spraying during bloom. The intention, when fruit trees are sprayed, is to destroy the eggs of insects who prey upon the fruit, and as this danger can only exist after the fruit has formed, usually it is of more importance to spray a week or more after the blossom has dropped than immediately after.

This question has some importance, especially owing to the fact that many farmers are prone to try new methods without having sufficiently posted themselves on how things should be done. With the more careful pomologists, this matter has been thoroughly sifted and they have so well understood the necessity of abstaining from spraying during fruit bloom that in several states laws have been passed to forbid the use of poisonous compounds on the fruit trees before the bloom has dropped, and these laws were introduced by horticulturists. There is no doubt that spraying has come with us to stay. This is the only

serious check we can oppose to the depredations of insects like the codling moth, or of fungi like the black-rot of the grape. Those to whom spraying is yet a problem are behind the time, if they have fruit in sufficient quantity to make it an object to care for it. The destruction of the black-rot by the use of the Bordeaux mixture and can celeste is an established fact. We have ourselves tested this to our own satisfaction. We have a vineyard of about 12 acres, which had become a worthless burden, owing to this black-rot when the grapes are about the size of peas. The first year of the trial of the Bordeaux mixture proved a failure. We sprayed too lightly and at the wrong time. But knowing that others had succeeded we persevered, and in the second season, carried the thing rather too far, for we used a mixture strong enough in some cases; to destroy the leaves on the vines. But the rot lessened, and two or three years of drouth helped to make it disappear. Last year, many people, who had considered the use of the spray as about as much waste, neglected to spray their vines, and in our immediate vicinity some vineyards were so much attacked that over a third of the berries dropped off. We have continued our spraying and had a splendid crop. We have never had a case, under our immediate observation, where the spraying was necessary or considered useful, at the time of the bloom, either grapes or trees. We spray the grapes about two weeks after the bloom has dropped, and the berries are of the size of a small pea and we aim to continue this until the rot shows itself on unsprayed grapes in other places.

After that time there seems to be but little danger from the spread of the rot. For fruit trees, some of our apple growers who use, as per the best authorities, a weak solution of London purple, have ascertained that the best succeeding fruit is that which is sprayed about a week after the bloom has dropped off. The fruit being well formed the surface retains more of the poison, which is therefore more effective. It must be remembered that as the fruit grows, its skin expands, and a part of its surface is thus deprived of its protecting coat of poison. As the greatest danger exists at this time, it is at this time that frequent sprayings must be used; and when the damage shows on unprotected fruit, when the insect has entered the skin of the defenseless fruit, the work of spraying is no longer needed.

It is then easy to see that our bees should have nothing to fear from judicious spraying, as this is not resorted to until after the dropping of the bloom. If it were necessary to spray during bloom, we would better leave it alone, for our bees are just as useful to the creation of the fruit as noxious insects are harmful to it, for they help fertilization, and it looks very much as if honey existed in plants only to attract them and secure their help for proper fertilization.

The above is in answer to an enquiry about using poisonous compounds to spray fruit, and the danger of injuring bees.

Hamilton Ill.

Farmer Bee Keep rs.

BY GEORGE W. WILLIAMS.

I notice much said in the Bee papers in regard to farmers keeping bees, and am sorry to see the prejudice held by some of our city brother bee-keepers

against the farmer who keeps a few bees. From the tone of some of these articles written by our city brothers it would appear that they think the farmer has no moral right to keep bees and that when he does he is trespassing on the rights of those who live in the cities.

I read an article not long ago in which the writer complained very much about the farmer bee-keepers rushing their honey on the market and knocking the price down, and left the inference that the farmer should wait until his city "cousin" had disposed of his "crap" before the farmer should offer his honey for sale.

Now, I am aware that many times the farmer does rush his product—let it be honey or anything else—to market and in the rush the price is forced down. Is honey the only competitor for a market between the city man and the country man?

I have been engaged extensively in berry growing for over fourteen years and observation has taught me that the large farm berry grower has suffered more from the fellows who live in the suburbs of the cities, who have say, from one sixteenth to one half an acre of berries, and when ripe pick and peddle them out in all kinds of shapes, all kinds of buckets, cans and cups and at any price they can get for such muddled up stuff, which of course knocks the bottom out of prices. Yet I have heard no complaint against the city berry grower by the farmer berry grower. I have made no insinuation that the man with the little plot of ground should not be allowed to raise berries, though he certainly does as much harm to the berry market as the farmer does to the honey market, so we might with propriety call it a "stand-off."

Does the man in the city aid the farmer in producing berries? No. Does the farmer aid the man in the

city to produce honey? Let all speak at once and answer. Suppose the legislature in each state should conclude that bees were domestic animals and the man who kept them must provide pasturage sufficient for their support, instead of allowing them to roam around and forage on what their keepers never planted, the city bee keeper "wouldn't be in it." Do not understand that I am advocating such an idea, far from it, but making a suppositional case..

Who has a better right to keep bees and do with his product what he pleases than the farmer? Is it not a fact that in many parts of the country the city bee-keeper must depend almost entirely upon the farmer for his nectar? The white clover pastures, the bloom of the bass wood that grows on the farmers' land, the Alfalfa, that grows in the west, the berry blooms all over the United States, the buck-wheat almost every where, the cotton bloom in the South, the vegetable blooms, and the farm staple corn bring in a good supply. The different fruit trees, vines of all descriptions, and other things "too numerous to mention," all of which are grown by the farmer, and after he has produced tons and tons of nectar shall it be said that he has no right to obtain help to gather and store it in the shape of honey?

Brother bee-keeper of the city, stop and think on whom you are depending for your honey crop and you will see that it is God and the farmer.

I hope we will have no more harsh insinuations about farmer bee-keepers; it is unjust, unreasonable; let us work in union and harmony, let us co-operate in the production of the delicious sweet and the disposition of it on the market. The farmer bee-keeper is not such a fool that he cannot feel these pricks, but on the other hand, he is sensitive to harsh and unjust

criticism; it only aggravates the case and makes it worse; let us therefore work as a band of brothers in this laudable business, advise, not criticize in the marketing of our products.

You who live in the cities have a good opportunity to know the state of the market, and when you see a farmer about to rush a lot of honey on an over-stocked market, or his honey is not in a marketable shape, advise with him what is best to do, and he will appreciate it and it will help to equalize the market so that there will be no stagnation at one time and at another no honey to supply the demand.

Humansville Mo.

Attention Necessary to Success.

BY EVERET MOSELY.

Bee-keeping, like any other business, requires attention, say our old experienced bee-keepers. I have not been in the business long, but, nevertheless, I find it true.

If you expect to have success with bees, you must attend to them, just the same as any stock about the farm. If you turn your stock out and fail to look after them, you will never have success raising stock. It is the same way with any business; you must look after it for it will not look after itself. Once in a while I find an old bee-keeper who has been in the business for twenty years or more, that keeps his bees in an old hollow log, or something of the sort. He generally believes he knows more about bees than any one else. If you try to convince him that the movable frame hive is the best, he will not believe you. He will say, "It is against nature to take comb out of the hive and put it back." His father, grandfather, and some neighbors said the old gums were the things to put

bees in, and any other arrangements are "tomfoolery." Of course, he was raised to believe it, and he can't go back on his "raisin." And now he knows but little more about bee-keeping than he did when he first began.

He may know how to hive a swarm of bees if they settle on a limb, but that is about all. If the moth get in among his bees they can stay, eat, and sleep without his knowledge. If his bees have not enough honey to winter them, it is all right, he will not find it out until he sees no signs of living beings flying out of his "gum" in the spring when they ought to be out at work.

To have good success in bee-keeping first you must have a good locality. It makes no difference what kind of bees you have, if you have a good locality to back you, your bees will gather a good lot of honey. Now, do not understand me to say one kind of bees is as good as another, for most bee-keepers will admit that the Italians are far ahead of the blacks. Some are for one kind of bees and some for another kind, so let every person decide for himself which kind is best suited for his locality. It takes good locality, the right kind of hives, and the best stock of bees to make bee-keeping profitable.

White Co. Ark.

Spring Management and Feeding of Bees.

BY HARRY LATHROP.

I am in favor of so conducting an apiculture that there will be but little artificial feeding to be done, and then only in exceptional years, but when, by reason of late, cold spring weather or long continued drouth the bees become short of stores, it is just as poor policy to neglect to feed them as it

would be to neglect other live stock on the farm.

I aim to have the brood chambers full of honey at the close of the season. Then extra combs of honey can be saved for supplying deficiencies in the spring. These extra combs should be stored over winter in a dry, warm room or by tiering them up on strong colonies that are packed on their summer stands. In either case the honey in these combs will not granulate, as it would if stored in a cold place. I will take this opportunity of saying, that a damp cellar is the worst place in which to store any kind of honey. These combs of honey saved over are the very best of feed and feeders combined. If a colony gets short of stores before the opening of the honey season, uncap one or more of these combs and hang it next to the brood, removing an empty comb. In the absence of extra combs of honey liquid honey or syrup, made from sugar, must be fed. This makes it necessary to use some kind of feeder and it is the best to have them of a uniform pattern and use system in the work of feeding.

I will tell you how to make a good feeder, one as good as any of those advertised by the supply dealers, some of which are difficult of construction and high-priced. Most every family is supplied with mason quart jars for canning fruit. These jars can be utilized for feeders during the spring months when they are not otherwise in use, with the sacrifice only of a set of covers. These must have the glass lining broken and about a dozen small holes punctured through the metal with an awl. Now take a piece of soft pine or basswood board seven-eighths of an inch thick and four inches wide and using an extension bit, cut holes two and three-fourths inches in diameter; cut so as to leave about one inch between each hole, then saw off mid-

way between. The holes in these blocks are just large enough to let in the top of the mason cover about one fourth of an inch; make a three fourths inch hole in your honey board or quilt over which place one of the rings; fill a mason jar with honey or syrup; screw on the perforated cap and invert with the top inside in the ring of wood. This forms a little chamber under the jar; the bees will come into it and suck the food from the perforations in the feeder; the pressure of the atmosphere will prevent the syrup from leaking. These feeders will be emptied by the bees in quite cold weather, being directly over the cluster. They do not expose the bees to cold drafts or induce robbing. The bees will take the food in this way when they could not take it from the entrance feeder, and one can readily see when the feeders need re-filling.

If you have extracted honey to feed, nothing better can be found, but for spring feeding it should be thinned by adding one-fourth or one third parts water. If you have no honey the next best thing is thin syrup made by stirring granulated sugar into water, warm or cold, until thoroughly dissolved. For fall feeding 15 pounds water, 30 pounds sugar, 5 pounds extracted honey are the right proportions for 50 pounds of food, to be thoroughly dissolved with as little heat as possible so as to prevent scorching. In spring bees may be fed on syrup as thin as they will take it as they need large quantities of water during brood rearing; and if it is not near at hand in some creek or pond it should be supplied to them in shallow troughs or pans in which chips or wooden floats are placed to prevent the bees from drowning. During the cold windy weather of spring it is very important that bees should not be compelled to fly long distances over

an exposed country in order to procure the necessary supply of water.

One of my apiaries is located near a running stream. At the other I have to supply them, and I find it takes several pails of water each day to supply an apiary of fifty colonies during the breeding season. In regard to feeding bees I do not advise heavy feeding in the spring, but enough should be fed to keep brood rearing going without intermission. I would rather have the profits that may be made from an apiary of 25 colonies that are properly cared for and got into shape for the honey harvest than the possible profits from double that number left to take their chance.—Wisconsin Agriculturist.

What Constitutes a Good Bee hive.

Simplicity and efficiency are the main requirements of the modern beehive. The hive produces no honey, but it is an indispensable implement in bee culture. The best implement is often a failure in inefficient hands, while an efficient operator can make a partial success even with poor tools, but for a first-class job we look for a good mechanic with the best tools. In the production of honey, like the production of anything else, at this time, competition is very strong, and if we would make a profit on the goods produced, we must cheapen the production. We must produce the very finest goods at the lowest possible figure.

This we can accomplish only by having the best bees, the best hives and implements, and handle the same economically. The man who rides "hobbies" and runs after "fads" in bee culture will have a lean bank account.—L. W. LIGHTY, in "American Gardening."

Agricultural Education

Agriculture.

FAR back in the ages,
The plough, with wreaths
was crowned;
The hand of kings and sages,
Entwined the chaplet round,

Honor waits o'er all the earth,
Through endless generations;
The art that calls her harvests forth
And feeds the expectant nations.
—W. C. Bryant.

Teaching Agriculture in the Public Schools.

By Prof. THOMAS SHAW, of Minnesota.

It is not at all surprising that the teachers have shown no anxiety to introduce such a study. A majority of those engaged in that work have little practical knowledge of agriculture. The curriculum is already crowded. Why should they be expected to impose on themselves an additional burden? As long, therefore, as we look for teachers to engage in this work voluntarily, as it were, through object lessons or otherwise, we shall be disappointed. The strong arm of legislation must needs step in and say that the thing shall be done, before it will be done.

Why should agriculture be taught in our public schools? It should be so taught, first, because agriculture is the principal concern of all the people in the rural districts; and because so it is likely to be in all coming time. It should be so taught, second, because teaching it properly would tend to imbue the young mind with a sense of its great importance relatively, and of its nobility. The young mind when in a state so plastic that it takes impression would be led to look upon agricult-

ure as work fitting for the princes and great ones of the earth, and not for clodhoppers and hayseeds. It should be so taught, third, that the profession may not only be seen in its true light, but that a hunger for its further prosecution would be created in the young mind when appetites for special lines of study are formed. Why should children have any natural bias to agriculture when they are taught almost anything else than agriculture? Why should they choose to be farmers when farming is held up to them at home and abroad as a kind of ignoble drudgery? And it should be so taught that the groundwork may be laid for a further study of the subject in the agricultural colleges, where it can be taught completely.

How should agriculture be taught in our rural schools? Some say by text books, others say by means of object lessons. The latter would seem to be the favorite idea at the present time. To illustrate: A teacher will select two plants, as clover and timothy. Both will be dug up, and from the plants themselves the teacher will make it clear as to why clover has ability to grow so well in dry weather, to furnish more plant food to the soil in its roots, to improve the texture of the soil and to benefit it in various ways more than timothy. Such teaching would be very potent, but in the absence of text books will the teachers do it? Assuredly no, not in a systematic and persevering way.

The writer leans to the opinion, and strongly, that agriculture will never be taught in our public schools until it is taught by a text book prepared for the purpose. Where shall we get such a text book? Why, some one will write it. The text book would be written tomorrow if there was a demand for it; that is to say, it would be written at once as soon as the demand for it was recognized. Yes,

a dozen such text books would be written, and a choice could then be made of the best.

The teaching from such a text book would be regular and orthodox. The youth of our schools would then know more of the great principles that underlie agriculture than is now known by the average grown man. And when they left the school to engage in the work of the farm they would begin that work in an intelligent way.

KEEPING THEM ON THE FARM.

As a general proposition, it is not desirable to "keep boys and girls on the farm," for that would exclude from the professions the most vigorous. And yet there is the need of removing the idea that an educated, cultured person has no place on the farm. And there is need, too, of combating the prejudice against farm life, with its isolation and attention to detail.

If farmers wish to keep their children at home they must more fully appreciate the nobleness and dignity of their own calling. They must teach that intelligent effort can win as rich rewards from the soil as it can in any line of labor in city or town. And this is true. Industry and intelligence win on the farm as well as in the professions. Farming pays under their sway, and when so conducted there is no surer, more independent, respectable and pleasurable way of engaging one's time. Let farmers teach their children the true dignity and true worth and possibilities of their calling, and the problem of keeping them on the farm will solve itself as much as the solution is desired—Carroll (Ia.) Herald.

The Semi-Weekly St. Louis Republic and the Busy Bee, both one year for \$1.00. Think of it! 116 papers for only

\$1. Send me your subscription at once before this offer is withdrawn.

Now is a good time to read up on apiculture. Send us \$1.25 and get Langstroth on The Honey Bee, and the Busy Bee one year, both for the price of the book.

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.

Golden sunbeams, pelting showers,
Arching rainbows, early flowers,
Music on the morning breeze.
Nest a-building in the trees,
Springing grass in wayside places,
Smiles on happy little faces,
Budding leaves on every bough,
Can you tell who brings them now.

Teach The Boys.

Teach them to make themselves useful about the house. You and they may both find it convenient sometime. Teach them how to sweep and dust as neatly as their sisters; teach them to cook plain dishes; to wash the dishes and put the kitchen in order. Teach them to use a needle properly, so that they will know better than to sew on a white button with black thread or to draw a hole into a pucker and call it mended. It will not make Miss Nancies of them any more than it makes a tomboy of a girl to help with the outdoor work, if occasion requires.

Many a boy will thank his mother for his ability to do these things when he goes out from the home shelter to do for himself. Many a man will be glad that his early training made him "handy" about the house when some

calamity overtakes the household and outside help cannot be obtained.

In families where there are no girls, or the boys are largely in the majority there is no reason why they should not lift some of the burdens from their mother's shoulders. Because a child is a boy, he need not be encouraged in the idea that his mother and sisters were made to wait on him. He should learn to brush his own clothes, care for his personal belongings and see that they are in their proper place; and, if his help is needed about the house, or, if he is idle when there are tasks he might perform, he should be taught to cheerfully lend a hand in whatever way he can.

A girl is taught to employ her spare time with needle work, painting, music or some other accomplishment. Why should not a boy learn to amuse himself with some of these things, or be furnished good books early in life, and encouraged to form the habit of reading during the months when the farm work does not require his time? Better this than sitting by the stove with his hands in his pockets or worse yet, wandering off to town to loaf in some store or saloon, where the company, to put it mildly, is not calculated to improve one's morals.

Minds make their own opportunities. Where one woman mourns that she has no time for mental culture, another, equally burdened, makes her chance, cuts a slip from a newspaper and pins it where she can read while ironing or washing dishes, and repeats poetry and proverbs to herself while going about the house, counting it no injury to her family if she does take ten minutes a day to keep her soul alive and growing.

—Standard Designer.

Send us the names of your friends who keep bees, and we will mail them sample copies.

The tops of celery dried and rubbed to powder are excellent for flavoring soups and gravies. The celery should be dried in the sun or in a very slow oven.

Horse radish root put into a jar of pickles will keep vinegar from losing its strength and prevent mold from forming.

—L. G. Bogle, in Colman's Rural World.

I have found that it is much better for the country mother to teach a child at home, until it is at least seven or eight years of age. At the age of ten they will then be up in their studies with children of the same age who were started to school when they were mere babies, and who are by this time weary of school life.

Mrs. M. W. Techenor, in

—Practical Farmer.

In no case should domestic dosing with advertised "headache cures" be indulged in, as the continual use of these preparations is apt to lead to the formation of a drug habit, difficult, if not impossible to cure.—Youth's Companion.

The don'ts for laundering white silk handkerchiefs are: Don't iron while wet with a very hot iron, or the silk will shrivel and spoil; Don't fail to rinse the soap thoroughly out of them or they will be coarse and hard; don't rub the soap directly upon them, or wash them in hot water, or they will turn yellow to a certainty. These are the directions, by negatives, to wash them well.—Journal of Agriculture.

To grow a tree, to dig a ditch, to shoe a horse well, to make or mend a garment, to produce a roll of exquisite butter or a loaf of perfect bread, must become a matter of honest pride not less than a brilliant oration, or a musical performance of surpassing skill.—Campbell's Soil Culture.

The Busy Bee,

The only paper of the kind in the United States which is edited
exclusively in the interest of

Farm Bee-Keeping

Monthly, 50 Cents Per Year.
Sample Copy Free.

GRAND PREMIUM OFFER

THE STANDARD CYCLOPEDIA OF USEFUL KNOWLEDGE

In 5 vols., 1268 Pages, 648 Illustrations. Regular price \$1.25. It is well printed from clear, readable type, on good paper, and neatly bound in handsome colored paper covers. Among the topics treated are: History, Biography, Travels, Inventions, Natural History, Horticulture, Agriculture, Stock Raising, Poultry, Floriculture, Home Decoration, etc., etc.

I have not the space to tell of the many topics treated, but suffice it to say that it will answer hundreds of just such questions as a thinking person is likely to ask.

The Greatest Offer Ever Made

I have made arrangements with one of the leading publishers whereby I am able to offer, for a short time, the above **Five Volumes, Absolutely Free**, to everyone who asks for them when sending me 50c for the BUSY BEE one year. I reserve the privilege to withdraw this offer at any time, so act at once, if you want to take advantage of the greatest bargain ever offered.

You will never get so much information for so little money again. Address,

Proprietor or BUSY BEE,
ST. JOSEPH, MO.

THE BUSY BEE.

A Monthly Journal Devoted to Farm
Bee Keeping and Other Minor Interests
of Progressive Agriculture.

REV. EMERSON TAYLOR ABBOTT,
Editor and Publisher.

Price, 50 cents per year, payable in advance.

OFFICE—118 S. Third Street.

Entered at the postoffice at St. Joseph,
Missouri, as Second-class Matter.

When the time for which your subscription has been paid expires your paper will be stopped. If you want to renew your subscription, you should renew before your time expires. This paragraph marked with a blue cross indicates that you will receive but one more copy of the paper unless you renew your subscription by the payment of 50c. If the paper comes to you when you have not subscribed for it, you may know that it has been paid for by some friend, and no bill will be sent to you.

REMITTANCES—Should be made by express or postoffice money order when it is possible. If these cannot be obtained, put the money in a letter and register it. Never send money in a letter without registering it. When forced to send stamps, we prefer to have one-cent stamps, and they should be folded carefully with paper between them so they will not stick together.

Editorial.

THE UNITED STATES BEE-KEEPERS' UNION.

Organized to advance the pursuit of Apiculture; to promote the interests of bee-keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men. Membership fee \$1 per annum.

Executive Committee: President, George W. York; vice president, W. Z. Hutchinson; secretary, Dr. A. B. Mason, Station B. Toledo, Ohio.

Board of Directors: E. R. Root, E. Whitcomb, E. T. Abbott, W. Z. Hutchinson, Dr. C. C. Miller, C. P. Dadant.

General Manager and Treasurer:
Eugene Secor, Forest City, Iowa.

Send us the names of your friends who keep bees, and we will send them sample copies.

AT this writing the weather is damp and cold here, and the prospects are that there will be more or less of this kind of weather for some time yet, so do not open your hives any more than is absolutely necessary. Every time you let a cold draft of air into the brood chamber you retard brood rearing to a certain extent, therefore the less you handle the bees in cold damp weather, the more bees you will have ready for work when the honey season comes.

For eleven months the Busy Bee has had to depend on others to get her matter set up and printed and many times we have found this a very great inconvenience. She now has her own type, and after this issue all of the matter will be set up in our own office.

This will enable us to get the paper out more promptly and at the same time we can give our advertising patrons better service. It is the aim of the management of this paper to make it helpful and advantageous to all its patrons. If we fail to do this, it will be for want of time and ability, and not from lack of earnest effort and fixed determination.

The Editor of the Busy Bee has received a hypercritical criticism on the grammatical construction of Mr. Stolley's letter on agricultural education accompanied with some suggestions as to how a paper should be edited. In reply I will say that theory will not always work out in practice. This paper does not propose to furnish models for smart young ladies and gentlemen in high school grammar classes. It only aims to give in fairly readable English some facts about bee-keeping and other things of interest and value to those who are engaged in rural pursuits. It may be that it is not proper to say "he" or "she," as

the masculine includes the feminine, but "he" and "she" will probably continue to say it, for in the language of the "wild and woolly West" we are convinced that "he" is not always "she."

The Editor is also called to account for using the expression a "new innovation," and is told that it is like saying a "new new thing." that innovation is from Latin so-and-so. Very true, the Editor wants to remark just here that he would say a "new new thing," if that was what he meant. An innovation, according to one use of the word, simply means a change in the accepted method of doing things. Now, if these changes came thick and fast, as they have of late in the bee-business, and I wanted to emphasize the fact that here was one of the very latest arrivals, I would say, this is a "new innovation," and I would mean just what I said, the grammar class to the contrary notwithstanding.

Now is the time to clean up around the apiary and remove all of the hives in which bees have died to a cool dark place, but not where it is too damp—or else the combs will get moldy. Do not leave any old combs lying around the yard, or any empty hives in the apiary; for, if you do, the combs will soon be full of moth larvae, and after a warm spell or two you will be writing to the Busy Bee to know what can be done to keep the moth out of your hives. "Moth-proof hives" and "moth traps" are a humbug, the way to get rid of moths is not to have them. See that all of your colonies have a good laying queen, for the moth miller soon finds those which are very weak or queenless. Unite weak colonies and those which are queenless with others, or send and get good Italian

queens and introduce them into the queenless colonies. Queens which have been reared in the south can be had quite cheaply now.

Have you anything to sell? Have you anything to trade? Do you want to tell the people, and a big lot of them all AT ONCE, about what you have? If so, just try a small ad. in the Busy Bee, and see how it will talk for you. It goes into 43 states and territories, Canada, and various other places, every month, and tells its story to a class of people who read and think, and have money to buy what they want, because they do not waste any moments complaining about what a hard time they have in the world. They do not kindle the fire with the Busy Bee the next morning after it arrives, but they keep it and read it and then read it again, for it contains valuable information which they are anxious to obtain. Reader, do you see the point? If so, just put the point of your pen to the paper and send us an ad., not a great big ad., in use of that in the Busy Bee, everybody reads every line of this paper, but just a small ad. This will not cost you much, but it will work wonders for you. TRY IT!

How to Prevent Swarming.

"How will I prevent my bees from swarming? I do not want more than one swarm from one hive this season."

You can not entirely prevent your bees from swarming, and I am inclined to think that it is not desirable. You can, however, regulate the swarming very much. The first thing to do is to see that the bees have plenty of room as fast as they are ready to occupy it. When they have one super filled about half full, lift it up and put another one under it. The supers, should, of course, be filled

with sections and the sections would have starters or full sheets of foundation in them. If you find that the bees are filling up the two supers rapidly, put a third one on next to the brood chamber. If there is a large honey flow, a fourth and even fifth super may be put on sometimes before the bees will swarm. After they once start in the super if you watch the matter closely and give them room at the proper time, they are not apt to swarm while the nectar is coming in rapidly.

When a colony of bees does not swarm, move the old hive to some other locality in the apiary, set the new hive on the old stand and put the swarm in it. It would be better to have the brood frames fitted out with half sheets of foundation. As soon as the swarm is hived, put all of the surplus arrangement on the new hive, and leave the old one with honey board and cover only.

When a colony is manipulated this way it seldom sends out the second swarm and the old bees work with much more energy than they would if they had not swarmed at all.

The Plain Sections.

Editor Holterman, of the Canadian Bee Journal, in reply to a question of a subscriber has this to say about the plain section.

"I think that the plain section is a decided humbug. If you make the bottom bar as wide as the side bar should be, there is not enough room for the bees to properly enter, and if you make the side bar as narrow as the bottom bar should be, it is not wide enough.

Those who are practical bee-keepers should not be so easily led astray.

Now, as to that new size section. For goodness sake do not let us get any more off sizes; We have just gotten

rid of the 3-1-2 by 4-1-4. The section does look a little better the other way, but the question is, is there any money in it? The deeper the sheet of wax in the section, the greater the tendency to sag. The idea that the bees pay any attention to whether the wood is in the side of the section or against the fence, is on the face of it absurd.

When a section is well filled, the bees attach the comb far enough out to the sides to strike the proposed fence, and in many cases the comb would be broken.

FARM BEE-KEEPING.

For what I deem good and sufficient reasons, I have concluded to call this paper by the above name at an early date. As the name BUSY BEE will be dropped entirely and the above name substituted, I now give notice in advance that no confusion may be caused by the change. There will be no change in the policy of the paper, but it will have a name more in harmony with the ideas for which it stands.

GOODS OUT OF OMAHA.

I would be glad if those who are in need of hives and other supplies, and find it less expensive to have goods shipped from Omaha than St. Joseph, would write and let me know what they will want and I think I can give them some information which will prove to their advantage. Remember our goods are as good as the best, and we cannot be undersold for goods of the same quality.

Read our premium list in another column. The machine we offer is first class, and you are sure to be pleased with it. It never fails to please. We have tested it.

Write for 1898 Price List to E. T. Abbott, St. Joseph, Mo.

A DRONE TRAP FREE.

If you do not have a Drone Trap, you need one. If you have one or more, you will find use for another one and I propose to give you one absolutely free. Here is my offer: Send 50c for the Busy Bee one year and 15 cents to pay postage on the trap and I will send you the Busy Bee one year and the trap by return mail. The price of the trap is 65 cents, post-paid, If you will send an order for some other goods to go by freight, the trap can go with them, and you need not send the 15 cents for postage. This offer will not be good after it ceases to be found in the current number of the Busy Bee, so send at once if you want to get the benefit of it before it is withdrawn.

We can still use more articles for the paper one year. Send them on in the best shape you can. Only make sure you have something of utility to say, and then say it the best you know how. Do not feel disappointed if you do not find your letter or article in the paper at once. We are receiving a great many communications, and it will take some time to find room for all of them. We have not gotten those communications from the ladies yet for the Home Department. Do not the wives and daughters of bee-keepers know some things that are worth telling in print? I am sure I know some who do, if they can only be induced to tell what they know.

Can you not spare a little time to get up a club for the Busy Bee? Until May first we will send the paper to any five people at the same post office for one year for \$1.25. The paper will not be furnished after that date for less than 50c and the names must all be sent in at once and from the same postoffice. No premiums included in this offer.

The big profits on the farm are generally from small things. In proportion to the work done and the capital invested the garden pays best. The small farm dairy always pays well; the chicken yard is profitable, and the orchard and vineyard may be depended on to bring good results. The best farms are those on which there is a diversity of interests, and all branches of farm work are followed.—Soil Culture.

Introducing Queens.

It is not necessary that a colony be queenless until you are ready to release the old queen, if you want to introduce a queen of an improved breed to a colony that has a black or an inferior queen. All of the books and instructions on the cages say "make sure that the colony is queenless and has been so for 48 hours." This is all a mistake and time lost. I have introduced scores of queens to colonies that never knew they were queenless, for as soon as I caught the old queen I fixed the cage so the bees could release the new queen, so in less than half an hour she was out walking around on the combs the same as though she had already been in the hive.

When your queen arrives, remove the board covering from the wire screen which you will find over the top of the cage. Place the cage wire down on the frames of the colony where you wish to introduce the queen. Leave the cage here for two or three days and pay no attention to the old queen. After the bees in the hive have become thoroughly acquainted with the new queen, hunt out the old queen and kill her, and then turn back the wire so the bees in the hive can get at the candy in the cage and eat it out and release the queen. Close up the wire and let the bees alone until the next day when you can examine

the colony and see how the new queen is coming on. If there is no queen proceed in the same way, only there will be no old queen to hunt out. For the benefit of those who have had no experience, I will say that the queen will generally be found near the center of the brood chamber. Lift out the frames carefully one by one, and examine both sides of each frame closely. After one has seen a queen a few times he will have no trouble in finding her on the combs. However, if she becomes alarmed, she is apt to hide around the corners of the frames, and under such circumstances is sometimes very hard to find.

One trouble with the deep frame is that the bees will eat away all the stores next to the top where it is the warmest, and the bees sometimes die because the clusters are left high and dry."—Footnote, p. 214. Sa-a-y. I saw that statement once before, and I thought the man did not know what he was talking about. Do bees honestly do that way? [What is the matter with the statement in question? Explain why you thought the man did not know what he was talking about. "Do bees honestly do that way?" They do indeed, sir, sometimes at least in our apiary, even on frames as narrow as the Langstroth; and I figure it would be worse if the frames were deep. But look here, doctor—you always winter in the cellar, while we almost invariably winter outdoors. See?—Ed.—Gleanings.

The Editor of the Busy Bee is inclined to wonder what kind of bees they have in Ohio. They do not do that way in this country. I wish Bro. Root would show us a picture of a comb where the bees have left the honey at the bottom of the frame. I am frank to say that I never saw anything of the kind.

Communications

BEE-KEEPING IN OREGON.

Editor Busy Bee:

Oak Creek, Oregon.

I received a sample copy of your paper, the Busy Bee. I congratulate you upon the improvement you have made in it. I will try to tell you something about the country here. The bees do very well here one year with another, generally making forty pounds per colony, extra good seasons more. Nice section honey brings on the market from 15 cents per pound to 20 cents. We have about forty colonies, and can sell all the honey we can get, and our customers are begging for more. Bee-keeping here is yet in its infancy. People yet talk about the "King" and queen bees, and tell how they govern the hive, etc. Our bees have been carrying pollen all winter, the weather being such that they can fly most of the time. Our wild forage plants for bees are the pine, maple, filaree, and native clover, which is very different from the eastern clover. In some places there is the white clover like the wild clover of Missouri. Most people here think the box hive just good enough. Their fathers kept bees that way, their grandfathers did the same, and so that is the very way to keep them. Some of our near neighbors that have been watching how we do are buying bees and learning progressive bee-keeping. They are very apt scholars, but at first they were mute with astonishment when they saw how we could manage bees. You may publish this if you think it worthy and I will write again if you can use my manuscripts.

Mrs. Jesse W. Thornton.

I shall be glad to hear more about bee-keeping in your locality, as such information is always of interest to the readers of the Busy Bee.

Plain Sections vs. Sections Open All Round; Which Would Be Cheaper?

I have been watching the writers in the bee journals in regard to the fence supers, and I find most of them think the greatest advantage gained

by the fence is to give the bees freer access to all parts of the super. Now I believe it to be a good thing to have your super so arranged that the bees can go east, west, north, south, up or down. This can be accomplished fully with the fence, and cheaper with fewer pieces to handle. How? By using sections bee-spaced all around. These I have been using for two years with good results. The bees go to work readily, and I have fewer bulged sections, or sections only partly filed, than from any other sections that I have used.

As to separators, I threw them away long ago. My sections filled with separators looked lean and gaunt, while those filled without them looked fat and full, yet not so full but they will crate nicely. Now, then, if sections that are spaced all around will give the result desired (better access), why handle a great lot of lumber for nothing? It would seem this was progressing backward. Simplicity is the order of the day, and not complication. I should like to hear from some other bee-keepers who have tried this kind of section. Perhaps, after all, we are not needing this kind of extra "fixin'."

Atwood Ill., Mar. 7. J. W. Gray.
—Gleanings.

The above from Gleanings comes as near expressing the ideas of the Editor of the Busy Bee as anything he has seen on the subject. It does seem to me that of all the cumbersome useless traps that have been introduced, this "fence" separator is the worst. If the readers of the Busy Bee want to know my opinion of them and some have asked it, I can give it in a few words. Let them alone! For fear that some one should think that I have a selfish motive in giving this advice, I will say that we have them for sale in every size and shape, and can make good money selling them.

Mr. Editor:

Your readers have undoubtedly read about the terrible disaster at Shawneetown. But like myself they have not thought much further about it.

It now appears that one of our brother bee-keepers, and a very deserving one, is among the sufferers, and I take the liberty to present the bee-keeping fraternity.

Mr. Thomas McDonald, of Shawneetown, Ill., was accidentally paralyzed in his hips and legs, by falling from a building in 1895. He has since been unable to work, being confined to a wheel chair, and his apiary of 200 colonies, and a few milk cows that he owned were managed by his wife and daughters. They were, in this way, making a good living, in spite of his inability to work.

The flood, which destroyed the entire town, drowning over one hundred people, deprived him of all he had. They lost their home, their cows and their bees, saving only their lives. Friend, bee-keepers, is this not a case deserving of our help? Let us do as other brotherhoods do, help our suffering ones, remembering that our turn may come to suffer. Let no one hold back because he can give but little it is the little drops of rain that make the mighty rivers.

If Mr. McDonald can get help enough to get a few bees he can keep out of the poor-house. Bee-keepers let us hear from you.

Subscriptions may be sent to Mr. McDonald direct or to the editor of this paper. The amounts received will be acknowledged in the Busy Bee.

Bee-Keeper.

Hamilton, Ill., April 11, 1898.

If you are willing to publish the above, I will vouch for Mr. McDonald's worthiness.

We sent Mr. McDonald ten dollars which you may put in the list, when the subscriptions come.

Yours truly,

C. P. Dadant.

I can furnish you the Williams trap at regular price. It is a good thing.

Hartford City, Ind., April 10, 1898.

My house for wintering is double walled, with sawdust packed between, with tight window shutters, so it is in total darkness when closed, ventilated from above. Bees are placed in the house about Nov. 1st with hives raised one to two inches off bottom board. When I desire to start brood rearing, hives are placed on benches two feet high, and the house is warmed by pipes to proper temperature.

I then place a hive ventilator on each hive, which is so constructed as to allow the bees to escape from the hive but are confined in the ventilator and after emptying and filling themselves with syrup, from feeder placed in ventilator, they return to the hive.

I placed forty-five colonies in house on Nov. 1st. March 1st I had increased to 65 and expect to increase to 100 by May 1st.

In conclusion will say, if this method is conducted exactly right, it is a great success, but if not properly conducted, it is a failure.

Though I have made a success the past winter, it was my third effort, having made two failures, before I succeeded in perfecting my method.

J. B. ALEXANDER.

Business

WALTER Newton, of Harvey County, Kan., says of the St. Joe hive: "The sample hive you sent me came all right, and I have examined it thoroughly, and am well pleased with it. It suits me the best of any hive I have seen."

J. D. Givens says of the "St. Joe frame," "I like them the best of anything I have yet seen in the way of a frame."

Jenny Bros., of Platte Co., Nebr. write, "We are much pleased with the Busy Bee, and you will find enclosed fifty cents for next years subscription."

The proprietors of the Frytown kennels, whose ad. will be found in another column, write me that they have a number of eight months old female Collies which they will sell very low. Write them.

Write to our advertisers, and see what they have to offer. They pay us for space in order to get you to do this. The more people who answer ads in the Busy Bee, the more ads we can get, and the more ads we can get the better we can make the paper. So you will see that you can help yourself by always mentioning where you saw the ad. Do not forget this.

Do you want to see one of the neatest and most interesting little farm papers published in the West? If so, write for a sample copy of THE RURAL HOME, St. Louis, Mo. It will only cost you one cent, and you will be more than pleased. THE RURAL HOME is published twice a month and we will club it with the Busy Bee, the two papers for the price of one, 50 cents. Write for a sample copy and then send us your subscription.

Have you seen a copy of the SOUTH WEST, one of the leading papers of the West? If not, write for a free sample copy. Address the SOUTH WEST, Springfield, Mo. We club it with the Busy Bee for 75 cents, the price of South West.

Our friends will please notice that we have moved to 118 South Third street. This is in the same block as 108 and only the third door from Edmond street.

The Best Offer Yet.

Get two of your friends to send with you, and send us \$1.00, and we will send each of you the Busy Bee for one year, and also one Porter Bee Escape to each of you as a premium. The price of the Escape is 20 cents, so it does not leave us much for the Busy Bee, but we want more subscribers and must have them. Act at once. Good only in blocks of three.

BEE-KEEPER'S REVIEW.

is the foremost bee journal of the Country devoted to the interests of advanced apiculture. Its writers are the very best in the land, and for artistic make up it has no superior. It is a large monthly and only \$1.00 per year. Send 10 cents and get three sample numbers of different months and the 10 cents will be credited on your subscription, if you subscribe any time in '98.

W. Z. HUCHINSON,
Flint,
Mich.

Poultry.

Bran For Poultry.

BRAN is excellent for poultry, and one point in favor of bran is that it contains a much larger proportion of lime than any other cheap food derived from grain, and as the shells of eggs are composed of lime, it is essential that food rich in lime be provided. It may be urged that oyster shells will provide lime, but it will be found that it is the lime in the food that is the most serviceable, because it is in a form that can be better digested and assimilated than carbonate of lime. Clover is also rich in lime, and when a mass of cut clover and bran is given the fowels, they will need no other mineral matter as a source from which to provide lime for the shells of

POULTRY SUCCESS is practically the theme of our new Poultry Guide and Combined Incubator and Brooder Catalogue. It tells all about the **RELIABLE INCUBATOR** and a great deal about the profits of poultry; about feeding—especially for egg production; about Pekin duck farming; leading character-



istics of 25 varieties of fowls, 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.

RELIABLE INCUBATOR & BROODER CO. - QUINCY - ILLS.

Muth's HONEY-EXTRACTOR
Square Glass Jars.

Root's Goods at Root's Prices.

Bee-keepers' supplies in general, etc., etc. Send for our new catalogue. "Practical Hints" will be mailed for 10c in stamps. Apply to

Chas. F. Muth & Son, Cincinnati, Ohio.

Southern Home of the Honey-Bee

Is now ready for your orders for **QUEENS** of either **3 or 5 Banded Italians** and **Steel Gray Carniolans**. More than **300 Tested Queens** to begin with. Untested, either race, 75 cts. each; June and until October 50 cents each. Tested, \$1.00 each. Good Breeders, \$2.00 each. Straight 5 Banded or "Faultless" Queens, \$5.00 each. Satisfaction guaranteed.

GEO. W. HUFSTEDLER.

Successor to Hufstedler Bros.,
BEEVILLE, Bee Co., TEX.

TRADE MARK REGISTERED.
BARLEY CRYSTALS

New Diuretic, Renovating Tonic Cereal. Endorsed by physicians in cases of weak and irritable Digestive Organs, and Kidney troubles. Emollient, attractive, palatable. Unsurpassed in the whole range of cereals.

PAMPHLET AND COOKING SAMPLE FREE.

Serialized in America or Europe. Ask Dealers, or Write to Farwell & Rhines, Watertown, N. Y., U.S.A.

Scotch Collies'

("Shepherd Dogs") puppies for sale, trained and registered parents of finest breeding. "Braehead" Smuggler (imported) in the stud. Fee \$10.00. Address

Frytown Kennels,
Hannibal, Mo.



POSITIVE MONEY MAKERS
THE NEW STYLE SUCCESSFUL INCUBATOR AND BROODER. Our NEW CATALOGUE and BOOK on POULTRY tells all about them and many OTHER THINGS the poultry man should know; worth a dollar but we send it for 6c. in stamps. **Des Moines Incubator Co.** Box Des Moines, Iowa. Address the **Des Moines Incubator Co.** 423 Iowa.



eggs. Do not forget that in summer, however, the use of all kinds of foods should be used with judgment. If the hens have a free range give them no food at all as long as they are laying, but if they begin to fall off, let bran be the leading ingredient of the the food allowed. In winter the bran and clover are even more essential, as the fowls cannot then secure green food on the range.

◇
 DO HENS PAY.

Geo. W. Pine.

This question is one upon which and still is a subject of diversity of opinion.

The writer of this article (at least for himself) was desirous to investigate and settle this question by keeping a careful and accurate account of the income and expense of thirty hens.

The account began the first day of January 1897 and was correctly kept for 365 days. The number of eggs obtained per month s as follows:

| | |
|-----------------|-----|
| January | 164 |
| February | 327 |
| March | 630 |
| April | 516 |
| May | 477 |
| June | 408 |
| July | 437 |
| August | 490 |
| September | 370 |
| October | 99 |
| November | 346 |
| December | 138 |

Whole number of eggs, 4,422; 368½ dozen. Sold fresh at an average price of 15 cents per dozen.

Ten of the thirty fowls were set and hatched a family of chicks. Cared for them until they were quite large. Seventy-five of the young fowls were sold in the fall at a net profit of 25 cents each, making, \$18.75; received for eggs, \$55.30; net income, \$74.05. The cost for keeping the fowls the year



A Record
 to be of value must be backed by continued worthy deeds. The **Prairie State Incubators and Brooders** have increased their first premiums to 200 in competition with the best. Send for 1898 catalogue, giving full description. Handsome colored plates. **We warrant every machine.** **Prairie State Inc'or Co.** Homer City, Pa.



HATCH CHICKENS With the **MODEL Excelsior Incubator.** Simple, Perfect, Self-Regulating. Thousands in successful operation. Guaranteed to hatch a larger percentage of fertile eggs at less cost than any other Hatcher. Lowest priced first-class Hatcher made. **GEO. H. STAHL,** 114 to 122 S. 6th St., Quincy, Ill.



Circulars free. Send 6c. for Illus. Catalogue.



MONEY IN HONEY!

The Weekly American Bee Journal
 Tells all about it.
 Sample Copy Mailed Free
G. W. YORK & CO.
 118 Michigan St., CHICAGO, ILL.

DOVETAILED HIVES,

Sections, Extractors, Smokers, and every thing a bee-keeper wants. Honest goods at close honest prices. 64 page catalog free.

J. M. JENKINS, Wetumpka, Ala.

In writing advertisers mention Busy Bee.

Attention Please!

We wish to send you a free sample copy of "THE SOUTHLAND QUEEN," the only Bee Paper published in the South. It tells all about Queen rearing, handling bees, etc.

THE JENNIE ATCHLEY CO.,
 Beeville, Bee Co., Texas.



IF YOU WANT A FRUIT JOURNAL
 THAT IS UP WITH THE TIMES SEND
 FOR A SAMPLE COPY OF
OUR HORTICULTURAL VISITOR, KINMUNDY,
 ILLINOIS.

was about 80 cents each or \$24.00; making the net profit, \$50.05.

Received one hundred and seventy-one eggs per fowl. They had good ordinary care, nothing more. None of the so-called patent egg foods were used but rather to ascertain if they would pay with ordinary keeping and if so how much. These fowls had their liberty spring and fall but were yarded during the summer months. If those who have fowls would give them reasonable care, better accommodation, they would receive a good return.—Poultry Advocate.

Subscribers are what count in the prosperity of any kind of a paper, and we are determined to have them, so here is another special offer. We will send the Busy Bee one year to anyone who will send us 50c to pay for the same, and mail them free of charge one Porter Bee Escape as a premium. The escapes sells for 20c, and everyone who has bees will find it very valuable.

QUEENS, April and May

Untested 60c; 6, \$3.00.

Tested, 80c; 6, \$4.00.

Bes by lb. or nucleus cheap. Best honey gatherers. Price list free.
 J. B. ALEXANDER, Hartford City, Ind.

READ

THE JOURNAL OF COMMERCE

The official price current of
 St. Joseph wholesale grocers. **\$1.00 PER YEAR**



125-A Year. MANHATTAN BUILDING CHICAGO. 10¢ A Copy

Is a 96 page monthly magazine. During the year 1898 we will eclipse all former efforts in agricultural publications. Subjects of absorbing interest, replete with valuable information and well supplied with entertaining reading for all the members of the Farm household, will be contributed by the best authors. Beautifully illustrated throughout. Stories by best writers. Special departments for Poultry, Live-Stock, Dairy, Gardening, Etc., Etc. Subscribe to it.

\$1.00 a Year. 10c a Copy.

The GENTLEMAN FARMER
 Manhattan Building
 SAMPLE COPY MAILED FREE! Chicago

GOLDEN or 5 BAND. **QUEENS** HOLY LAND.
 Your Choice.

Either race at following prices.

| | | | |
|------------------------------|------|------|-------|
| Untested Queens. | one | six | doz |
| In June, July, August, Sept. | .75 | 4.25 | 8.00 |
| All other months. | 1.00 | 5.00 | 9.00 |
| Tested Queens. | 1.50 | 8.00 | 15.00 |

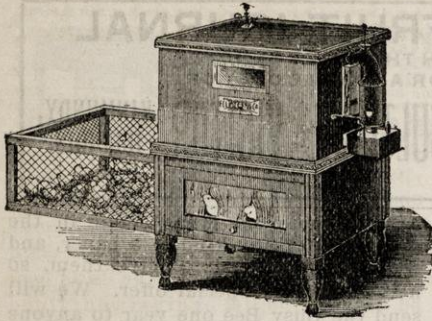
Ten per cent. off if six or more Untested Queens are ordered Thirty Days before they are to be mailed. Safe arrival guaranteed.

E. R. JONES, Milano, Texas.

Salesmen For Buckeye Riveter.



The handiest tool ever made for mending harness, belting, tugs straps, etc. Indispensable for farmers, liverymen, teamsters, etc. Good agents now making \$150 to \$300 per month, sample outfit 1.50. Address, The Tuscarawas Mfg. Co., Canal Dover, Ohio.



ECLIPSE BANTAM.

A perfect little Incubator and Brooder combined. Self regulating, Automatic Egg Trays and ventilation and moisture supply. Mfg. in 36 and 50 Egg sizes. Price, \$7.50 and \$10.00.

We also manufacture the

IMPROVED NOXALL INCUBATOR,

which we fully Warrant and give a written Guarantee with each machine. Send six cents for large illustrated Catalogue.

GEO. W. MURPHY & COMPANY, QUINCY, ILL., BOX 13

ROOT'S GOODS.

Our

Special-

ties.

The Fence and Plain Sections.
Weed New Process Foundation.
Cowan Extractors.
Porter Bee-escapes, the best made,
Dove-tailed Hives with Danz. patented cover and [bottom].
Danzenbaker Hives.
No-drip Shipping-cases.
Gleanings in Bee Culture; illustrated, semi-monthly.



Catalogue of goods and sample copy of Gleanings sent for your name on a pos. al.

THE A. I. ROOT CO., O., MEDINA, O

Branch Offices: 118 Michigan St., Chicago; 1024 Mississippi St., St. Paul, Minn.; 1635 W. Genesee St., Syracuse, N. Y.; 10 Vine St., Philadelphia, and Mechanic Falls, Me.

Gleanings At Reduced Rates.

New subscribers sending us \$1.00, or old subscribers who send us

\$1.00 BEFORE SUBSCRIPTION EXPIRES

will receive a copy of the A B C of Carp Culture, 70 pages, price 40 cents, postpaid, the pages the size of these; or we will send, in place of the carp-book, one copy of

WINTER CARE OF HORSES AND CATTLE,

by T. B. Terry, a book of the same size pages as the carp-book, 44 pp.; price 40 cts., postpaid; or in place of either one of the two we will send

MAPLE SUGAR AND THE SUGAR BUSH,

a book of the same size pages, costing also 40 cents, postpaid. Remember, in order to get one of these valuable books all you have to do is to send \$1.00 for Gleanings, and 5 cts postage, and we will give you one of them free. Remember, old subscriber, to be entitled to this offer must pay up all back subscription, if any, and send in \$1.00 for a year in advance with 5 cts. for postage.

THE A. I. ROOT CO., Medina, Ohio

COMB FOUNDATION.

Wholesale
And Retail.

Working Wax into Foundation for Cash a Specialty.

Hives, Sections, and a full line of Supplies. The Best of everything. Write for a catalogue with prices and samples of Foundation and Sections.

Beeswax wanted for cash or trade.

GUS DITTMER, Augusta, Wis.

THE AMERICAN BEE KEEPER

A monthly, now in its 8th year; **50c per year.** Its contents are furnished by some of the best writers on the subject. Devoted exclusively to bee culture. Edited by a practical bee-keeper of wide experience. Sample free on application. Address,

The W. T. Falconer Mfg. Co.,
JAMESTOWN, N. Y.

BEE-SUPPLIES



We have the best equipped Factory in the West—Capacity—one carload a day; and carry the largest stock and greatest variety of everything needed in the apiary, assuring **Best Goods at the Lowest Prices**, and prompt shipment.

Illustrated Catalogue, 72 Pages, **FREE**.

We also manufacture Tanks of either wood or galvanized steel, all sizes, any form, and for all purposes. Price List free. Address

E. KRETCHMER, Red Oak, Iowa.

THE "ST. JOE" HIVE.

This is one of the best hives made, and is first class in every respect. You should not buy any hive until you have seen a description of this one. **IT LEADS THEM ALL**, and never fails to please. Write for circular. A crate of five St. Joe hives will be given to anyone who sends me a club of 15 subscribers at 50 cents each, for one year for the Busy Bee. No other premiums. Or every new subscriber to the Busy Bee will be sold a crate of "St. Joe" Hives for 50 cents less than the regular price, \$5.00.



Golden Wyandottes.

They are the fowls for eggs, beauty, thriftiness and rich, juicy meat. There is no better fowl for the farmer. They are about the size of Plymouth Rocks, but are more hardy. I have some very fine birds, and sell eggs at hard times prices. Thirteen eggs, carefully packed, \$1.00; select eggs from my best birds, \$1.50 for thirteen.

E. T. ABBOT, St. Joseph, Mo.

STURTEVANT'S POULTRY REMEDIES.

THANOLICE.

A Dust for the Destruction of Lice. Trial size, 10 cts.; larger sizes, 25 and 50 cts.

EMERSON T. ABBOTT,
St. Joseph, Mo.

IT'S EASILY HANDLED A CHILD OPERATES THE PALACE INCUBATOR



**30 DAYS FREE
TRIAL BEFORE
BUYING.**

WE PAY THE FREIGHT.

OUR CATALOGUE EXPLAINS ALL. WRITE FOR IT.

ADDRESS TO **PALACE INCUBATOR CO.**
BOX **MERRIAM PARK, MINN.**



Globe Bee-Veil.

Five cross-bars are riveted in the center at the top. These bend down and button to studs on a neck-band. The bars are best of light spring steel. The neck band is hard spring brass. The netting is white, with face-piece of black to see through.

It is easily put together, and folds compactly in a case 1x6x7 inches—the whole weighing but 5 ounces. It can be worn over an ordinary hat; fits any head; does not obstruct the vision, and can be worn in bed without discomfort. It is a boon to anyone whom flies bother, mosquitoes bite, or bees sting.

Price, \$1.00; extra nets, 50c; will club it with The Busy Bee for \$1.15. Cotton, tulle veils, plain, 50 cents; silk front, 60 cents.

Emerson T. Abbott.

St. Joseph, Mo.

Bee-Keepers'

We make ❁ ❁ ❁

❁ ❁ ❁ the finest line
in the market, and sell
them at low prices. ❁

Supplies.

Send for Illustrated Catalogue and Price List.

G. B. LEWIS CO., WATERTOWN, WIS.

E. T. Abbott, St. Joseph, Mo., Special Agent for Southwest.

Mr. Abbott Sells our Hives and Sections at Factory Prices.

A BOON TO BEE-KEEPERS.

No more runaway Swarms. No more climbing trees to save Swarms. No more running and hunting up the ladder, swarm box, etc., for with

William's Self-Hiver, Queen and Drone Trap,

[Patented Nov. 16, 1897.]

A boy or girl who can handle an empty hive can have a swarm of bees in three minutes.

Price, Single Trap, \$1.00.

Write for circular. Address,
GEO. W. WILLIAMS,
Humansville, Polk County, Mo.

BIG HONEY CROPS.

There is no state like California for excellent and large crops and the ease with which Bees are manipulated. No wintering problems, and the Bees nearly always board themselves. Three hundred dollars per colony is not a small average and we often hear of \$500. You should read The Pacific Bee Journal which covers the entire territory west of the Rocky Mountains—an excellent paper. Photo engraving every issue. Monthly, 50 cents a year. Pacific Bee Journal. Los Angeles, Cal.

Intensive cultivation is the keynote to success.

SUCCESS

Waits on all who subscribe to



\$1.00 a Year. Every Saturday.

The Suburban Home and Country Life
A Practical Guide to Gardening and
Fruit Culture in the Open and Under
Glass, Landscape Art, Forestry, Home
Ground Improvement, Bees, Poultry,
Birds and Dogs.

Worth 100 a year and more. The only true
guide to successful life in the country.

Premiums to every subscriber.

Send for free specimen copy showing premium
offers and cash prices, open to all.

AMERICAN GARDENING.

P. O. Box, 1697. New York

DOVE-TAILED HIVES.

One body with eight frames, Hoff-
man, and one presser board, bottom,
super with section holders, wood sep-
arators, etc., gable cover, including
nails to make the same. Made of good
white pine, and by first class work-
men, in lots of five, 75 cents each.
Write for price list. Emerson T. Ab-
bott, St. Joseph, Mo.