



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The busy bee. Vol 9, No 3 March, 1898

St. Joseph, Missouri: Rev. Emerson Taylor Abbott, March, 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.

MARCH, 1898.

NO. 3.

PUBLISHED THE FIFTEENTH OF EACH MONTH.

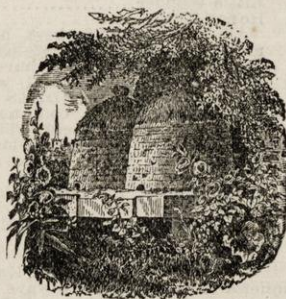
A Monthly Journal
Keeping and the other
to-Date and Progress.



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.

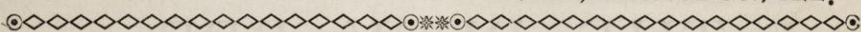
LANGSTROTH ON THE HONEY-BEE--Revised,

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

CHAS. DADANT & SON,

Please mention The Busy Bee.

HAMILTON, Hancock Co., ILL.



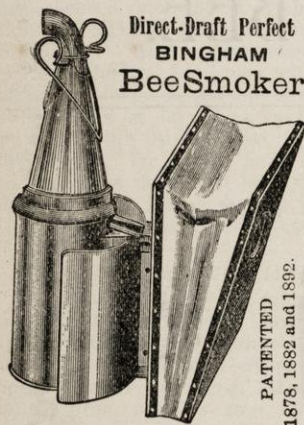
PRICES OF Bingham Perfect Bee-Smokers and Honey Knives.

Smoke Engine	largest smok- er made	4 in. stove	per doz.	each.
Doctor	3½	"	9.00—	1.13
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			6.0—	.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 suttty nor burnt fingers. The Plain and Little Wonder have narrow shields and wire handles. All Bingham Smokers have all the new improvements, viz: Direct Draft, Movable Bent Cap, Wire Handles, Inverted Bellows, and are **ABSOLUTELY PERFECT.**

十五 years for a dollar. One-half a cent a month.



Cuba, Kansas, Jan. 27, 1896.

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

W. H. EAGERTY.

Corning, Cal., July 14th, 1896.

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

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 too 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.

MARCH, 1898.

No. 3.



The Editor.

THE HONEY BEE AND THE FARMER.

By David N. Ritchey.

Now, Mr. Editor, you may find fault with me for not placing the farmer before the bee, and possibly I could have done so, but I beg leave to differ for more than one reason.

First, the honey bee can get along, and has done so, without the farmer. For thousands of years she has gathered nectar from the different flowers without any particular attention from the farmer, and has assisted him in getting large yields of berries and other fruit. It is an admitted fact that the honey bee has more than

doubled the yield of clover seed, and yet it would seem that three-fourths of the farmers are ignorant of the important fact that without pollination, there could be no perfect fruit or seed.

If you will show me a farmer who is not an owner of one or more colonies of bees, I will show you one who is not up to the times; and often he is a man who lives "from hand to mouth," laying not up in store for the future, neither for himself nor for his wife and little ones. I believe the day will come when almost every farmer will keep bees and produce a No. 1 grade of honey; that the day is near at hand when the farmer will realize the fact that the honey bee, like woman, is one of God's own gifts to man, and without, both woman and the bee, the farmer would make many more failures than he does.

I can show you farmers living by me who had not had a crop of clover seed for twenty years, until I moved here and bred my bees to such a size that they can work on the red clover; and now they are getting large yields of the very best of seed. Not only are they getting good yields of clover seed, but they are getting more perfect fruit than ever before, and more of it. While the farmers are being benefitted by the little busy bee, the bee is becoming more and more, every year, a cherished pet by all who are learning of its great good to the farmer, and of the glorious medicine which it gathers from the flowers, gathering as it does, nature's own pure sweet in a way that no other creature can. I believe the time will come when the farmer will be so enlightened as to know these things for himself and will be a keeper of bees, because of the great good they are doing, and will consider them in their true light, a blessing.

What per cent of the farmers do you suppose have honey on their table as a food? I venture to say not five per cent., while in their own fields are hundreds of pounds going to waste almost every year.

Now, the thing for you and me to do is to educate the farmer on these different points, and he will soon see the importance of keeping a few colonies of bees. One of the best ways to bring this matter before the farmer would be to have a part of one day of each county and state fair set apart to have the bee subject discussed. I do not know how other states are, but I do know that the State of Ohio pays but little attention to bees, and does not offer premiums enough on an exhibit to pay freight in getting the goods to the fair. So you can see there is very little or no encouragement.

I believe it the special duty of all bee journals to bring this matter up. I expect to present the matter to our State Fair officers, and hope to have the best meeting of bee-keepers at our next State Fair ever held in Ohio.

We bee-keepers have been asleep, and it is time for us to wake up. We know what the busy bee can do, and it is our duty to make it known to our fellow men, especially the farmer. Reader, will you help?

Black Lick, Ohio.

SOME NEW YORK BEE-KEEPERS.

By Daniel Cook, M. D.

A few miles north of the city of Binghamton, lies the town of Chenango in the State of New York. The eastern boundary is the Chenango River. Its surface consists of the river, intervalles and several ridges, which rise to an altitude of from 300 to 600 feet and are separated by the narrow valley of the streams running parallel with them north and south through the town. On the north hills the soil consists of a gravelly loam, mixed with disintegrated slate underlaid by hard pan, but farther south it becomes a deeper and richer gravelly loam. Part of our town is not very productive, while some other parts are very fertile. Most of our land is moist, and for this reason is principally used for grazing. Dairying is the chief agricultural pursuit. The town covers an area of 21,154 acres, of which about 15,000 are improved, and, in the language of the east, it is worn out.

Now for the bee resources and bee-keeping. Our largest bee-keeper is Mr. Ira L. Scofield, who has in all his api-

aries only 1,300 colonies. How will that compare with some of your westerners? Henry Bishop with about 100; Bert Bishop with 28, myself with 20, Alfred Brook with 12, George Leyton 8, W. Hall Ross with 35, Oliver Seamans with 25, Anthony North with 32. On the hills west of me there are only a few small apiaries. All of these bee-men live within two miles of me. Mr. Scofield and Bishop have apiaries out of town in what is called here the lake country. Bee men estimate that there are about 400 colonies kept here in stock. When well tended they pay fairly well, if we only can have a good year for bees and bee-keeping. Now 400 colonies of bees on 21,154 acres, gives only a small bee population per acre; yet we are considered to be the bee center in this county. Tioga county lying just west of us has only a few bees. This seems to be how it is here. Some towns have a full stock of bees while some others have only a small supply.

We are only 80 miles south of G. M. Doolittle, the uncrowned king of the Buffalo convention, and 38 miles south east of the home of Mr. Miles Morton, who has some ideas of his own, and knows how to make bee-keeping pay. I am a great lover of Italian bees, and I am trying to keep my apiary pure. I have my queens of Lochhart & Co. out at Lake George, and they are just dandy, and their progeny are splendid workers. During the honey flow they seem to vie with each other in doing their level best. My apiary is situated in an old orchard, sloping to the east, so that to the east in front of them, and to the north and south they have open valley. To the west rises a ridge of hills. This I think a great advantage to them to be able to ascend the hill empty and when loaded, to come home all the way down hill. There is no wind that can hit my apiary, the hills are in such shape.

This fall I divided my apiary, putting 12 colonies in my cellar and left 8 out in the yard in large chaff hives, well packed with buckwheat chaff. The weather has been so warm now for a week that my bees have had a good cleansing flight almost every afternoon. Perhaps next spring, I will report which lot wintered the best. I am in favor of Langstroth alive, but not with a loose bottom. I have other makes of hives, but do not like them as well as

the Langstroth hive. I use them with 9 or 10 frames.

Since writing this I visited the venerable bee-keeper, Mr. William Slawson, at his home at Chenango Bridge—a youth of only 98 summers, being born in the state of Massachusetts, in the year 1800. Reader just think a moment, 98 years of age! What changes he has seen take place around him, what a grand life well spent in the Master's cause his has been. Mind as clear, eyes as bright and step as quick and spry as most men at 50 or 60. Can it be that this old gentleman owes his long life to the free use of honey as an article of diet? Will some reader of the Busy Bee answer.

Binghamton, N. Y.

THE RETURNS TO BE EXPECTED FROM AN APIARY.

Although apiculture is extremely fascinating to most people who have a love for out-of-door life, with enough exercise to be of benefit to one whose main occupation is sedentary, the income to be derived from it when rightly followed is a consideration which generally has some weight and is often the chief factor in leading one to undertake the care of bees. Certainly, where large apiaries are planned, the prime object is the material profit, for they require much hard labor and great watchfulness, and the performance of the work at stated times is imperative, so that in this case there is less opportunity than where but a few colonies are kept to make a leisurely study of the natural history and habits of these interesting insects, because—unless the keeper is willing to forego a considerable portion of his profits—his time must necessarily be almost wholly taken up in attending to the most apparent wants of his charges.

One very naturally supposes that the return from a single hive, or several of them, in a given locality, may be taken as a fair index of what may be expected each season. Such return, if considered average, may serve as a basis on which to reckon, but as so many conditions influence it great differences in actual results will be found to occur in successive seasons. Apiculture, like all other branches of agriculture, depends largely upon the natural resources of the location, and the favor-

ableness or unfavorableness of any particular season, no matter how skillful the management, may make great differences in the year's return. The knowledge, skill, industry, and promptness of the one who undertakes the care of the apiary have likewise much to do with the return. Furthermore, profits are of course largely affected by the nature and proximity of the markets.

A moderate estimate for a fairly good locality would be 20 to 35 pounds of extracted honey or 20 pounds of comb honey per colony. This presupposes good wintering and an average season. When two or more of the important honey-yielding plants are present in abundance and are fairly supplemented by minor miscellaneous honey plants the locality may be considered excellent, and an expectation of realizing more than the yield mentioned above may be entertained. With extracted honey of good quality at its present wholesale price of 6 to 7 cents per pound and comb honey at 12 to 13 cents, each hive should under favorable circumstances give a gross annual return of \$2.50 to \$3. From this about one-third is to be deducted to cover expenses other than the item of labor. These will include the purchase of comb foundation and sections, repairs, eventual replacing hives and implements, and the interest on the capital invested. By locating in some section particularly favorable to apiculture—that is, near large linden forests, with clover fields within range, supplemented by buck-wheat; or in a section where alfalfa is raised for seed; where mesquite, California sages, and wild buckwheat abound; where mangrove, palmettoes, and titi; or where sourwood, tulip-tree, and asters are plentiful—the net profits here indicated may frequently be doubled or trebled.

But these favored locations, like all others, are also subject to reverses—the result of drouths, great wet, freezes which kill back the bee pasture, etc., and though some years the profits are so much larger than those named above as to lend a very roseate hue to the outlook for the accumulation of wealth on the part of anyone who can possess himself of a hundred or two colonies of bees, the beginner will do well to proceed cautiously, bearing in mind that much experience is necessary to enable him to turn to the best

account seasons below the average, while during poor seasons it will take considerable understanding of the subject energetic action, and some sacrifice to tide over, without disaster, or at least without such great discouragement as to cause neglect and loss of faith in the business. On the whole, there should be expected from the frames of bees for any purpose whatever only fair pay for one's time, good interest on the money invested, and a sufficient margin to cover contingencies. With no greater expectations than this from it, and where intelligence directs the work, apiculture will be found, in the long run, to rank among the best and safest of rural industries.—Farmers' Bulletin No. 59, United States Department of Agriculture.

Another one told Pa that bees would make honey out of any thing. He had known them to go into the carcass of a dead horse and make honey.

Many other curious questions have been asked about bees. I know that bees do not make honey, they only gather it from the flowers. I know that the bees will not always die if the queen dies, but they will sometimes raise another queen.

We run for extracted honey and get as high as 396 pounds from one colony. I help Pa take the honey off, and I get stung sometimes, but I don't give up for that.

BLAINE DICKMAN.

BEES AND SMALL FRUIT.

By D. V. Bennett.

FUNNY QUESTIONS ABOUT BEES.

Defiance County, Ohio.

I am a little boy thirteen years old. My Pa keeps bees, and I help him a great deal in the apiary, and I hear a great many questions about bees that are quite funny.

A traveling man, stopping for the night with us, asked Pa if the bees were not making honey now in the cellar? After being told that they were not, he wished to know if they were placed in a building above ground whether they wouldn't make honey all winter.

Another asked, "Are your bees making much honey now?" The thermometer being close to zero.

Another, said if the queen should die the whole colony would be sure to die. And was wonderfully surprised when told that they could raise another queen.

Another asked "Vat your pees maken mit dat honey?"

Another asked, "How many times a day do you take your honey off? and do they ever sting you?"

Another asked, "Where does your bees get that wax that they bring in on their legs?"

Another asked, "Ain't that Advallorum that they bring in on their legs?"

Another one looking through the hive and seeing considerable brood thought that it would all hatch out at once.

In writing this article to the readers of the Busy Bee, I will endeavor to give my reasons why I think bees and small fruit should go together. First, and the main reason is that if one fails you have the others to fall back upon, they will not be very apt to both fail the same season, and more than that the small fruits will, as you might say give almost a double harvest, for they get more honey by having a patch of berries within easy reach, and they in turn will fertilize the bloom so that you will have a larger and better crop of berries than you would have had without the bees.

Now do not over do this by having more bees and more small fruit than you can attend to, and do justice to both unless you have plenty of help, for I have found by my own experience that with from twenty-five to fifty colonies of bees, and an acre of mixed small fruits, and with what work there is to do on a thirty acre farm, one man will have enough to keep him busy without going fishing once a week for want of something to do.

Now if your apiary is situated so that your berry patch is near to it, you will find that you can work both nearly as well and with but a little more time than you would spend if you had but the one to attend to. If there is any thing I enjoy it is to hear the busy hum of the bees among the flowers, while I am at work among them. You will get larger and fairer fruit. Many

of my neighbors wonder how I can raise such nice berries: now I am inclined to give the bees the credit of it, or at least part.

If you are a beginner in fruit-raising, do not make a mistake right here by getting every variety of fruit that you see advertised, or buying of every agent that comes along, what he says is the best variety that grows, or will yield the largest crop that was ever heard of, but send your orders to some good, reliable fruit grower, where you are sure of getting what you send for, and that your plants will reach you in good condition. This will hold good with bees also. If you are a fruit grower, try a few bees. Do not invest in too many colonies to begin with, but try a few at first until you get used to them and know what to do for them. Do not experiment with too many different kinds of bees at first, but if you have a neighbor who keeps bees, buy one or two colonies of him, for you will have a great deal better success with them than you will to send several hundred miles for them, and I will guarantee that you can get as much and as nice honey from the old-fashioned black bees, as you can with the best of Italians, if taken care of and worked in the same way.

Lenox, Ohio.

BEES AND FRUIT.

"An orchardist in Gloucester, (England), planted 200 acres; the orchard was a complete failure in fruit-bearing until a Scotch bee-keeper put in 50 colonies of bees. When properly fertilized by the bees, the orchard began to bear. The acreage was then extended to 500 acres, and the apiary was increased to 200 colonies; the orchard now produces a large amount of fruit, and a large jam factory is operated on the tract, and all of this property is owing to the beneficial intervention of the honey-bee. Several instances of a similar nature might be cited. The honey-bee is certainly a great factor for the production of perfect fruit."

The above statement made by Thomas W. Cowan before the California Bee Keepers' Association, as reported in the American Bee Journal, is another testimony as to the benefit of

bees to the fruit growers to be added to the long list which previously existed.

I am inclined to believe that the day is not very far distant when every fruit grower will be compelled to recognize and confess the fact that he owes a large part of his success to the bee-keeper, or rather to his industrious little workers.

When that time comes, the two industries will work hand in hand, and we will hear no more about bees injuring fruit.

Another point brought out by Cowan was that in England small apiaries are the rule, and large apiaries are not encouraged. Many apiaries are kept in fruit-growing districts for the purpose of fertilizing the fruit-blossoms.

This is just what the Busy Bee would like to see in this country, the time come when every farmer and fruit grower will keep a few bees, and the value of the honey-bee to the orchardist, and of honey as a food product will be generally recognized.—Editor.

It is impossible to walk across so much as a road of the natural earth, with mind unagitated and rightly poised, without receiving strength from some stone, flower, leaf, or sound, nor without a sense as of a dew falling on you out of the sky.—Samuel Johnson.

The Rural New Yorker in speaking of colonizing city people in the country says: "There is one fatal weakness in all such plans, that will be sure to break them down. That is the foolish belief that any creature walking on two human legs is good enough to make a farmer. Somehow, our benevolent friends will not drop the notion that any man set down upon a few acres of land must be able to make a living. The fact is that almost any man jumped directly from brick and stone to tuable soil, would starve quicker in a plowed field than he would on a street corner. It requires brains and skill to make a living on the farm. It is no child's play to go to Nature for support."

Hot water taken freely half an hour before bedtime is an excellent cathartic in the case of constipation, while it has a soothing effect upon the stomach and bowels.—Nebraska Farmer.

Agricultural Education

AGRICULTURAL EDUCATION IN FRANCE.

A correspondent in the *Practical Farmer*, writing from Paris, says:

"The increasing rush of young rurals for the cities and towns continues to sadden statesmen. In 1846, for every 100 of the population 24 resided in the towns, and 76 in the rural districts. In 1896, the ratio is 40 and 60; in fifteen years the population will be equally distributed between the town and country. It is proposed that the primary schools where the teaching of elementary book agriculture is compulsory, the school-master ought to inculcate upon his pupils the fact, that the profession of farmer is the most independent of all, can be the most remunerative for practical laborers, instructed and intelligent, while it affords a surer means of livelihood than the towns. The Minister of Agriculture appears to fall in with this view when he remarks that the teacher too often considers himself to be a professor of agriculture, for which he has had no technical apprenticeship. He should rather aim to give the pupil a taste for his future profession, and not forget that the best plan to make a workman like his work is to make him able to comprehend it. Never will it be necessary to teach the pupil what his father knows better than the teacher, and that in due course the pupil will acquire by practice. Endeavor to make the pupil have a love for field life, and a desire to never exchange it against that of the town and the workshop. Such is the official remedy."

There are a few points in this quotation which seem to be worthy of special note. First, teaching "elementary book agriculture is compulsory" in France, which is a step in the right direction. Second, that the "Minister of Agriculture" has the correct idea as to the work to be done by the teachers in rural districts, namely, "give the pupil a taste for his future profession" and "endeavor to make the pupil have a love for field life, and a desire never to change it against that of the town and the workshop."

We are struggling with the same problem in this country. We as a nation are being cursed by the massing

of large numbers of inhabitants in cities and towns, and we have made less progress in the solution of the problem, in my opinion, than they have in the old countries. The thing of prime importance with us now is that the teaching of the elementary principles of agriculture should be made compulsory in all of the public schools of the land.—Editor.

TEACH THE CHILDREN AGRICULTURE.

The following is an extract from an address delivered by Gov. Mount of Indiana, as reported in the daily papers: "A few evenings ago I heard a discussion among disunited gentlemen of this city. It was the consensus of opinion that the most discouraging outlook for agriculture was found in the fact that too many young men were leaving the farm. Statistics and observation strongly tend to show that the urban population is rapidly increasing, while that of the rural districts is increasing at a far less rate. The casual observer might conclude that this is to the advantage of the farmer, as the tendency is to the decreasing of products and the increasing of consumers. The careful student of economics, however, wants to understand the reason why there seems to be so little attraction in country life.

"Farmers, as a rule, are inclined to talk farming down instead of exalting its possibilities. One of the gentlemen above referred to said that some aggressive efforts are needed to attract attention and add interest to farm life."

"The Superintendent of Public Instruction informs me that the total amount annually expended in the cause of education in Indiana would not fall short of \$10,000,000. I am in favor of the broadest kind of education, but I want farmers educated in the science of agriculture as well. There is practically no instruction as to how crops grow, the elements of plant food they require, how to conserve and how restore those elements to the soil. There is little or nothing in the text-books of our school to interest children in nature study."

Just so, I wish we had more men in public offices preaching such doctrines. It would hasten the day when the

farmer will take his proper position in society, and children will be taught what they most need to know, namely, how to see things and to think. A gentleman said to the writer a few days ago that he had a boy 17 years old, but he had never sent him to school because he did not want him to be a "fool." Some food for thought here.—Editor.

SWEET CLOVER.

The following from the American Bee Journal is from the pen of Prof. Cook:

"I have noticed all the recent words of commendation regarding sweet clover in the several journals. That occasional cases of cattle and horses eating mellilot clover may occur we do not doubt. Frequent statements to that effect may have been made, and I am always slow to impeach another's veracity in such case. Cattle and horses may be crowded by hunger to eat what is really distasteful and unappetizing. In all such cases the food is of doubtful value.

Again, mellilot may be grown on exceptional soil, or under exceptional conditions which may be more appetizing. If this be true, we may believe it exceptional. Usually the quality of sweet clover does not attract any of our stock. I still believe that mellilot, while it is excellent for honey has little value as a forage plant. It has one other value. It is a legume, and so takes nitrogen from the air, through the aid of the nitroifying microbes. It is thus valuable for green manuring. I wished much to find this plant valuable for hay and pasture. I have often seen it in pasture and by roadside, left wholly undisturbed by horses, cattle, etc.

Again, white mellilot is strictly, so far as I have observed, a biennial. It grows vigorously for one season, storing up starch to push its growth and development the second season, when it blooms and forms the seed. The first year the stems and foliage are tender and succulent, and, were they savory, would furnish much good feed. But this would be of no use to bees, as the flowers do not come till the next season. The second season, the stalks are coarse and large, and would be of little or no use for pas-

ture or hay. Yet, now the bloom comes with sweet scent and big load of nectar. This again would discount the value of sweet clover except for honey and green manuring, even tho it were appetizing.

The yellow sweet clover here in Southern California appears to be an annual, to grow vigorously, and tho of doubtful value for hay and pasture, may prove to be valuable for trapping nitrogen, and enriching the soil."

I am sorry to know that the Prof. has such a poor opinion of sweet clover as a forage plant, but I feel inclined to give both sides of the case, thinking that by so doing we will be more able to arrive at the truth.

I want to say to friend Cook, however, that I know one horse that does not have to be "crowded by hunger" in order to eat it. My "pony" eats it because she likes it, but she had to learn to eat it by degrees. Editor Root of Gleanings, goes after Prof. Cook in this fashion: "My, oh my! where has Prof. Cook been these years? If he will come out east again and call upon friend Boardman, and a dozen others I could name, at the right time of year, he will find that stock often prefer it to other fodder. The Ohio Experiment Station once opposed the clover, but has now taken back all the bad things it said of it, and actually favors its introduction. Notwithstanding we see miles of it growing like weeds along the roadside, it certainly has proved to be a great blessing, because it grows where nothing else can live. It is true, very many regard the clover as a noxious weed; but that does not prove that it is. In some parts of the West there are hundreds of acres of it grown, and hundreds of tons of it cut for fodder. Where nothing else grows it is a God-send. I should almost as soon expect to hear Prof. Cook say the world is not round as to argue against sweet clover."

It is to be regretted that so many of our brightest and best young people are seeking other occupations than farming. Some of them, doubtless, are choosing aright. But we believe that many who are going to our cities and large towns, especially those who are going from farms, would do much better to give their time and labor to the cultivation of the soil.—Practical Farmer.

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.

A little seed lay in the ground,
And soon began to sprout;
"Now which of all the flowers around,"
It mused, 'Shall I come out?'
It criticised each and every flower,
This supercilious seed,
Until it woke one summer hour
And found itself a weed.

—Home Folks.

GOVERNMENT BULLETINS.

It does not seem to be generally understood that the Agricultural Department of the government furnishes bulletins on a variety of subjects relating to agriculture free of cost to anyone who applies for them.

For this purpose the department employs scholarly men who are thoroughly conversant with the subjects they discuss, and these bulletins are both interesting and instructive. Their design is to give the results of experience in certain lines of work, and to help the farmer to more intelligent and effective methods. The farmer's wife, as well, can be benefited by the study of some of the subjects treated:

Among those she will find of special interest, are: "Facts about Milk" (Farmers' Bulletin (No. 42); "Dairy Bacteriology," (No. 25); "Milk Fermentations and their Relation to Dairying" (No. 9); "Souring of Milk" (No. 29); "Fowls: Care and Feeding" (No. 41); "Standard Varieties of Fowls" (No. —); "Foods: Nutritive Value and Cost" (No. 23); "Meats: Composition and Cooking" (No. 34); and "Chemistry and Economy of Food" (No. 21).

All of these give many facts which every woman who has the care of milk, or poultry, or a family to cook for should know and heed. Any intelligent woman may get suggestions from them that will enable her to im-

prove the quality of her butter, and thereby increase the demand or raise the price; or increase the egg production of her flocks; and she may have her eyes opened to the fact that the subject of feeding the human animal is about as important a study as that of balanced rations for the four footed beasts.

The ultimate aim of the great majority of cooks is to prepare something to please the palate. When this is done they are satisfied; but this is only half of a cook's duty. She should know whether the dishes she is preparing are digestible, and whether they contain the elements that are necessary for nourishing the system properly. The three government bulletins last named will help her in the study of this subject.

A postal card addressed to the Secretary of Agriculture, Washington, D. C., and asking for the bulletins desired, giving name and number, will bring them by return mail. It does seem that if farmers' wives and all housekeepers were awake to their value, more would avail themselves of the opportunity of securing them.

I think perhaps most women have acquired too many habits of industry. It is true that there is much to be done, and usually only one person to do it, but that is no reason why that person should make a martyr of herself. There should be a period of rest. Idleness we know is wicked, but rest is not idleness. No woman is a machine, warranted not to wear out. A woman with a large family and innumerable duties should learn how to put her duties upon different members of the family. She should make herself the manager. That, in itself, is such an important and responsible position that the other members of the family ought to be willing to carry out her orders.—Beatrice in Soil Culture.

Oh, excellent wife, do not cumber yourself and get a rich dinner for this man or woman who has alighted at your gate, nor a bed chamber ready, at too great a cost.—Emerson.

Do not wait for spring to examine the condition of the cellar. Decay, death and diphtheria are a familiar trio.—Montana Fruit Grower.

Important Events

THE PURE FOOD CONGRESS.

There was held in Washington, D. C., beginning March the 2d, one of the most important meetings ever convened on this continent. I refer to the National Pure Food and Drug Congress. It was called together by a local committee made up of public spirited and enterprising gentlemen who live in and adjacent to the city of Washington. There was a general response to the call from all over the country and representatives of the various industries interested were there from as far west as California and as far east as Maine.

There were nearly 300 people in attendance, and almost every leading productive industry of the land was represented. The writer and General Manager Secor went as delegates, at the request of the President and Board of Directors, to represent the United States Bee-Keepers' Union. As there was considerable expense attached to such a long trip I had some doubt at first about the propriety of sending delegates, but the moment I reached Washington and saw the class of men there present and the industries which were represented, all doubt was dispelled. One of the leading ideas of our Union is to "prevent the adulteration of honey," and more was done at Washington in co-operation with other industries in two days than we could do in years working alone. What we want and need is a National Pure Food Law covering every article of human consumption for either food or medicine, and we seem now to be in a fair way to get it, and the members of the United States Bee-Keepers' Union can feel that they have had a hand in the making of it. Your delegates received the fullest recognition on the floor of the Congress, and bee-keeping at once took its place along by the side of other trades and industries, and was recognized as a part of the great movement for pure food and common honesty, which is sweeping over the country from Maine to California. Mr. Secor was placed on the committee on credentials and the writer was made a member of the committee on Permanent Organization, and was subse-

quently elected chairman. Later Mr. Secor was appointed a member of the committee on resolutions and myself a member of the legislative committee of 25 to consider the "Brosius bill," and report to the Congress. We were also made vice-presidents for our respective states. I do not mention these things to bring myself and Mr. Secor into prominence, but to let the bee-keepers know that our union received full recognition by the other industries.

The Congress elected Mr. Blackburn, the present food commissioner of Ohio, and a gentleman of sterling worth and wide experience in pure food legislation, its permanent president, and I take pride in saying that as a member of the committee on permanent organization I had a hand in presenting his name to the Congress. He proved to be the right man in the right place.

I have not the space to give a full account of the meeting, but will say that the unanimity of sentiment and feeling manifested by the representatives of the various industries of the country on the subject of pure food points to the fact that a powerful influence will be brought to bear on the Congress of the United States, when the bill comes before it, for its immediate passage. The reader can help to swell this influence by writing to his congressman and the members of the senate from his state, saying that their constituents ask that when the bill recommended by the Pure Food Congress comes up for passage that they give it their hearty support.

This is not a political measure, but a movement in the interest of common honesty and the health and prosperity of the people, and all good men and women who believe in fair play can unite in urging its passage without regard to their political affiliations, or "previous condition of servitude," if you please. **DO IT AT ONCE!**

The times in which we live are great, so great that we can hardly conceive them great enough, so great that we, old and young, cannot be great and good and brave and hard-working enough ourselves, if we do not wish to appear quite unworthy of the times in which our lot has been cast.—Max Muller.

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 South 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.

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

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.

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.

If you have not done so before, you should examine your bees now and see if they have plenty of honey to last them until the flow of nectar begins in your locality. Remember what I said last month about strong colonies requiring a great deal of food when they were rearing brood rapidly.

Be on the lookout for robbers during the warm spring days before the flow of nectar begins. They are very apt to get in their work where the colonies are weak. Close up the entrances to all weak colonies so only one or two bees can pass in and out at a time. It is much easier to prevent robbing than it is to stop it when well under way.

Why not call the "tall section" the "Armstrong section" or the "G. B. Lewis Co. section?" Mr. Armstrong used then in his "Crown Hive," and the G. B. Lewis Co. made them long before Mr. Danzenbaker began to advertise their so-called "advantages." If we are to return to old and discarded "fads" in the honey business, let us give the proper parties credit for them.

There was only one article sent in to compete for that crate of "St. Joe" hives and that will be found in this issue of the paper. It was written by D. N. Ritchey of Black Lick, Ohio. We have sent him the crate of "St. Joe" hives, and trust he may find pleasure in manipulating them. Reader, are you not sorry you did not send in an article and get one of the other premiums?

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.

I am led to wonder sometimes who it is that writes the notes on bees for some of the daily papers, and whether the writer ever really saw a beehive or not. Take the following from the St. Louis Republic as a sample.

"Thorough ripening of honey is more than color." Thorough ripening of what kind of honey, comb or extracted? "Is more than color, when? In the market, or on the table? If you mean comb honey in the market, you are way off. Color is about nine points out of ten for comb honey in the market, and I am sure color is always first in the market with extracted honey. Honey should be thoroughly ripened, but no amount of ripening will make dark honey bring more than light in any market with which I am familiar.

"Do not winter bees in a house unless it is frost proof and dark." Why frost proof, pray tell, and why dark, if the entrances of the hive open out on the outside? Guess you did not know exactly what was meant by "wintering bees in a house."

"Smoke is the only thing that will subdue and control bees." How about chloroform? I guess it would thoroughly quiet them, if enough was used.

"Filling frames of comb with syrup and placing the same in the hives is one of the best ways of feeding." Feeding when? If the writer had ever tried filling combs with syrup, perhaps, he would not be so confident about it being the best way to feed.

"Almost all extracted honey will granulate and become like sugar during cold weather." Honey does not become like sugar when it granulates. There is just as much difference between granulated honey and sugar as there is between liquid honey and sugar.

"Cereals of any kind will furnish pollen and the bees will devour it greedily. Oats are a good material to use." How would corn fodder do? Such "notes" would be of more utility to bee-keepers, if they were written by some one who has a practical knowledge of the industry. My advice to such papers is to either leave out the so-called "bee-department," or else secure the services of a practical bee-keeper.

Send us the names of your friends who keep bees for a sample copy of Busy Bee.

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.

DO BEES INJURE GRAPES?

Prof. Troop, of the Indiana Experiment Station, has been investigating this question afresh. From a Worden grapevine with ripe grapes, all defective berries were removed and a colony of bees enclosed with the vine under mosquito netting, allowing the bees 300 cubic feet of room. The bees soon got used to the confinement, and after three weeks not a single grape had been injured.—American Bee Journal.

SHALL WE MEET AT OMAHA?

Editor Root in commenting on the editorial in the Busy Bee with regard to holding the next meeting of the United States Bee-Keepers' Union at Omaha, says: "Although not a member of the executive committee, I for one would be most heartily in favor of having the Union meet at Omaha. In fact, it seems to me it is the place above all others for 1898. Hurrah for Omaha!"

Bro. Root is correct. This is the place above all others for the '98 meeting. Not because I am near Omaha do I think this, but because I am sure that a meeting held there under the circumstances will be productive of more good than could possibly grow out of a meeting held in any other place. A multitude of bee-keepers are bound to visit the Trans-Mississippi and they will all arrange to be there during our meeting, if the location is selected, and the announcement made early. It is now settled beyond a doubt that there will be the largest and finest display of honey and aparian supplies at Omaha that was ever set up on this continent and we all want to see it. Let us go to Omaha!

FILLED CHEESE.

An Omaha paper in speaking of the possible manufacturing of "filled cheese" at Arlington, Neb., says: "We take the liberty of serving notice on that community that if you engage in this dishonest cheese making system you will add another law to the statutes of Nebraska and create another expensive state office, called "Dairy Inspector," whose duty it will be to arrest, imprison and prosecute scoundrels who adulterate dairy products."

The question arises in my mind, why "another expensive state officer?" Is it not about time to stop passing laws in the interest of special industries and for their protection? Have not the people some rights in this matter? And if they have, why not pass one law making it a criminal offense to adulterate any kind of food? Why raise a hue and cry about adulterated cheese and butter and let the mixers continue to put up glucose with a small chunk of honey in it and label it "pure honey," as they are constantly doing in Omaha under the very nose of this editor, without a single protest? No, gentlemen, not more laws to protect special industries, but one to protect all industries, strong enough to send everyone of these frauds who persist in obtaining money under "false pretenses" to the pen where they belong, as much as any other one who commits a crime against society!—Editor.

BAD SPELLING AND GRAMMAR.

Mr. Hutchinson, in the Review for January, referring to communications that come from bee-keepers who, though well versed in their business, and able to give valuable facts, and yet hesitate to write because of defective spelling, penmanship, or grammar, says, "Book-learning is good, but it is not every thing." And then adds: "I hope no one will ever hesitate one moment about writing me because of a lack of book-learning." That is just the way I feel about it. I want my friends to write to me, no matter what their spelling or schooling has been.—Editor of Gleanings.

This has been our position from the start, and we take this occasion to say to one and all, "If you have something

to say to the readers of the Busy Bee, say it the best you can and send it on. It will receive proper attention." I have known men who had enjoyed excellent school advantages who had no practical ideas, and then I have seen those who had no "book larnin'" at all, who were just full of good practical suggestions.—Editor.

IS SWEET CLOVER A NOXIOUS WEED.

Below is the decision of the Ohio Experiment Station, sent out in the form of a newspaper bulletin:

How Shall we Rank Sweet Clover (*Melilotus*)?—Many portions of Ohio have the roadsides and other sodden or "out of tith" lands occupied by the white sweet clover plant (*Melilotus alba*, L.). Since it has been regarded as a noxious weed the former Ohio Statute placed it in the same list of proscribed plants with Canada thistle, common thistle, oxeye daisy, wild parsnip, wild carrot, burdock, and cockle-burs.

Under the operation of this statute, private lands might be entered upon to destroy the *melilotus* growing for any purpose, as for bee-pastures. The destruction of bee-pastures in this manner actually occurred near Delaware.

Rightly, then, it may be asked, "How shall we rank sweet clover?" To answer this we must consider where sweet clover grows and what is its character. Sweet clover, grows spontaneously along tramped roadsides, even to the wheel-ruts in abandoned roadways, and in tramped or sodden land anywhere. When found in meadow lands it appears not to occur except when the ground has been tramped by stock when wet. It grows by preference in old brick yards. It may be grown in fields by proper tillage.

The character of sweet clover may be now determined. Viewing it in no other light we thus see that sweet clover grows luxuriantly in places where few or no other plants flourish. But it belongs to the great class of leguminous plants, which are capable, by the aid of other organisms, of fixing atmospheric nitrogen and storing it in the plant-tissues. It belongs with the clovers, and it may thus be used to improve the land upon which it grows,

and this appears to be its mission. It occupies lands that have become unfitted for good growth of other forage-plants. Its rank, then, is as a useful plant, capable of increasing fertility of land.

How shall sweet clover be treated?

The character determined, the treatment to be accorded this clover-plant is really settled. The plant is the farmer's friend, to be utilized and not to be outlawed. The plant grows and spreads rapidly. So do red clover, white clover, timothy, blue grass, and other forage-plants; but sweet clover grows where they do not; it indicates lack of condition for the others. Viewed in this way it is to be treated as preparing unfitted lands for other crops.

It may be mown a short time before coming into bloom, and cured for hay. Stock will thrive upon it if confined to it until accustomed to it. The roadsides, if taken when free from dust, may be made almost as profitable as any other area in clover by cutting the sweet clover and curing for hay. If this is regularly attended to while stock is kept from other lands that it invades, sweet clover will be found doing always the good work for which it is adapted.—Gleanings.

Communications

SMALL FARMS, ETC.

Nodaway County, Mo., Feb. 23, 1898.
Editor Busy Bee:

—After carefully reading two sample copies of your excellent little paper, I feel that I cannot well afford to do without it and keep bees. I am a new hand at bee-keeping, having just taken five stands on shares, so shall watch the Busy Bee for "pointers," and shall expect to get some (sharp ones) from the bees themselves before the season closes.

I was particularly impressed with the article "Small Farms" in February number. Twenty acres well tilled, and well managed could be made to yield sufficient for a large family besides something for a rainy day. It is surprising what can be done on such a place providing one has a taste for the kind of work I shall suggest. Of course, one could not expect to do

much on twenty acres by raising nothing but corn and hay. But by combining poultry, fruit and bees, I see no reason why one should not succeed after they once get a start. There are too many trying to run large farms. The man with twenty acres paid for and well improved is more independent than one with eighty or one hundred acres heavily mortgaged.

What life is more fascinating than a farmer's? I love to watch the trees and vines put forth new buds, fruits and flowers; the busy bees garnering sweets from a hundred sources, the hens scratching in the barnyard, the cows browsing. There is contentment in stirring the soil, in gathering in the crops.

On most farms there is either no garden at all or else a small patch is turned over to the "women" folks, just as if the poor woman did not have her hands full without this extra care. I have known a frail woman do her house work, raise the chickens and make the garden, while the men folks, two big, stout, healthy fellows, lounged around in the shade! These men did not like bees, but they did like honey. They did not like to plant trees nor tend to fruit, still they were ready to eat it after some one else had done the work. Such men will not succeed on twenty acres—or a hundred, either.

Yours truly,

G. E. NICHOLS.

East Berlin, Adams County, Pa., Jan. 24, 1898.

E. T. Abbott, St. Joseph, Mo.:

Dear Sir: Your favor of January 6th, and also the 3 copies of B. B. with education article to hand, for which I thank you. I very carefully read your article and will say you presented the subject better than I ever saw it presented. I truly wish every rural teacher in our great land could read your article and possibly that would induce him to carefully read Herbert Spencer's little work on Education, as you quote freely. The Grange and farmers clubs could do much if they would only undertake it, but politics and cheap buying, etc., take all their time. I only see one remedy and that is to arouse the sleepy farmers through our system of farm-

ers institutes. From practical experience I will say that the old farmers in our part of Pennsylvania are few who take any interest at all in the advancement of the rising rural population. I admire the backbone of your editorial in the B. B. I am disgusted with our older journals who pat each other on the back and say, "Oh, but you are a good fellow; you have a fine paper" to get a return compliment! Bosh!

Very truly yours,

L. W. LIGHTY.

Lewiston, Pa., Feb. 21, '98.

Publisher Busy Bee:

Copy Busy Bee received and it is well worth the price asked, but you are also offering as a premium the Standard Cyclopaedia of Useful Knowledge, a book worth \$5.00 to any family. For the benefit of those who might want to subscribe, I copy the contents of the five vols. I have. They have 650 illustrations.

Respectfully,

J. I. BROUGHT.

Fifty pages Biographies; 25 pages History; 60 pages Natural History; 60 pages Manners and Customs; 32 pages World Illustrated; 60 pages Arts and Manners; 50 pages Trees and Plants; 20 pages Great Inventions; 20 pages Mining; 20 pages Wonders of the Sea; 40 pages Familiar Science; 40 pages Law; 40 pages Statistics; 10 pages Fences; 20 pages Farm Crops; 30 pages Home Amusements; 20 pages Fertilizer; 25 pages Gardening; 20 pages Orchard and Vineyard; 10 pages Small Fruit; 50 pages Live Stock; 30 pages Poultry; 10 pages Bee-keeping; 30 pages Dairying; 70 pages Cooking Receipts; 30 pages Fancy Work; 25 pages Flower Culture; 50 pages Family Physician; 20 pages Laundry; 50 pages Hints and Helps; 40 pages Decoration; 30 pages Etiquette; 60 pages Embroidery; 40 pages Nursery; 30 pages Lace Making; 14 pages Decorative Painting.

Editor Busy Bee:

Since December 1, 1897, up to date, March 1, 1898, my bees flew on 31 days, and being well packed should come out all right. But late last autumn about 15 colonies of them were greatly damaged, by large number of bees being killed in the Beet Sugar

factory, which is but half a mile distant from my apiary. I have been injured in the same way once before, but not as seriously as this time. The bees were killed "by the bushel" by being permitted to enter the rooms where sugar lays loose, and no means of escape were provided for them. I gave notice to the superintendent of the factory, to provide for the needed escapes, but he was of the opinion "that I should keep my bees at home." Now friend Abbott, what do you think of the matter? Will I be entitled to the protection of the "Union" or not?

Yours truly,

WM. STOLLEY.

I am in doubt as to what could be done in a case like this. One would think that the owner of the factory would be glad to provide screens for the doors and windows to keep the bees out that the help might not be bothered by them. I doubt if the owner of the bees would be able to sustain a damage suit in such cases.

The Busy Bee no doubt has some lawyers among its readers, and I would be glad to hear from them briefly on this subject. I would also be glad to hear from the general managers of the Unions.—Editor.

J. P. H. Brown, Ga., writes: "Let me thank you for sample copy of your paper. It is the embodiment of good for the bees, for home and for humanity."

Ed. Jolley, Pa., writes: "We have had but little very cold weather here this winter, and still very little that was warm enough for the bees to fly out. My bees had a splendid flight to-day, March 3d, and seem to be unusually strong for this time of year."

I would be glad to hear from others as to the condition of their bees.—Editor.

The wife makes a great mistake, who having cast her lot with one, whose best interests hold him to the country, influences him by her discontent to go to town. Make your husband happy, and like a boomerang, happiness will return to you.

—ANNIE W. LEE, in Rural World.

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.

"Bee-Keeping for Beginners" is the name of a neat paper bound book of 110 pages by J. P. H. Brown, Augusta, Ga. It is what it claims to be on its title page, "a practical and condensed treatise on the honey-bee." The beginner will find much in it that will prove helpful and suggestive. It covers the entire field of apiculture, and for one who has only a few colonies of bees may well be made to take the place of a larger and more expensive work. The price of the book is 50c, and I will send it post paid on receipt of that amount, or I will club it with the Busy Bee for 75c.

Business

Look our Incubator Ads. over.

The A. I. Root Co. have a new ad in this month.

The hand cultivator advertised last month is a fine tool and I would advise you to look it up.

The attention of our southern readers is called to the ad. of Mr. J. Jenkins on another page.

The G. B. Lewis Co. have applied for 100 square feet of space at the Omaha Exposition.

I can sell you an INCUBATOR, a "WOODEN HEN" or a BROODER very cheap. Write for prices.

Are you troubled with chicken lice? If so try a box of Thanolice. You will find it advertised in another column.

By mistake the ad of the American Bee-Keeper was left out of our columns. It will be found in another place this month. By the way this paper has a new editor and has been very much improved.

The address of Sears & Cessna, who advertised the "Handy Riveter" last month is Sedalia, Mo. This is a good tool and it will pay every farmer or owner of harness to write them for particulars.

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.

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 Hufstедler Bros.,
BEEVILLE, Bee Co., TEX.

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.



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. Address the **Des Moines Incubator Co.** 423 Iowa, Des Moines, Iowa.

Poultry.

POULTRY ON THE FARM.

I am only a renter and labor under many disadvantages which others similarly situated can appreciate. Here is my story.

I keep about sixty hens, all grade Brown Leghorns. They are not up to the standard, but I am trying to improve them by buying one cockerel each year and mating him with six or eight of the best hens. In this way I hope to get a good laying flock without paying out a great amount of money.

I rent thirty acres of land, two and a half miles from town, and raise corn, hay, potatoes, onions, etc. There is an alfalfa patch and a small orchard of young trees on the place. The land is adobe, with alkali patches, and cannot be irrigated. Wheat is my staple feed in summer and corn in winter, varied occasionally with barley and Egyptian corn. I also feed some potatoes for breakfast. These I wash, cut up, boil till soft, season with salt, then stir in bran, or in winter unboiled corn meal, keep covered up one night using pot liquor when obtainable. I also give them all the clabbered milk there is to spare, and keep powdered shells within their reach. I feed early in the morning, before sun up. For green feed I sow little patches of barley when the first rain falls; this I repeat at intervals through the winter; then plant corn or sweet corn until the ground is too dry.

I use hens for hatching, generally buying brood hens in winter and disposing of them again when the chicks are weaned. I set fifteen last spring which hatched about 150 healthy chicks.

I sell spare roosters as soon as possible so as to make room as soon as possible for the rest of the flock. The price ruled very low this year. I have but one henhouse, 8x20 feet, eves covered and sided up with stakes. I use

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 130 MERRIAM PARK, MINN.

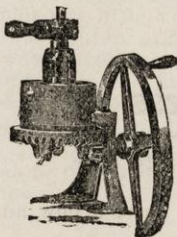
COMB FOUNDATION Wholesale and Retail WORKING WAX into Foundation for CASH A SPECIALTY,

At Reduced Prices During the Winter. My Foundation will SPEAK FOR ITSELF, and prices are O. K. So do not fail to write for a Catalogue with prices and samples.

Beeswax taken in Exchange for Foundation or any other Supplies.

GUS DITTMER,
AUGUSTA, WIS.

Green Cut Bone.



There is nothing better than this to make HENS LAY.

MAN' BONE CUTTERS are as good as the best. I can sell you one, cheap.

Write for prices.
E. T. ABBOTT,
St. Joseph, Mo.

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.

some bubach in the nests of setting hens. Frequently in the summer I whitewash the inside of the house; in winter I do not whitewash so often, but clean the house once a week.

I have kept a record of eggs received in the six months ending July 31, and find that the hens laid on an average 102 eggs each. Some of them raised chick, some are quite old and two died, otherwise the result would have been better. Sold the eggs in town at from 10 to 16 cents per dozen, averaging about 12½ cents. The other six months they laid less, but the higher price made the final result about \$2.00 per hen, gross. Just what the feed cost I cannot tell, as I feed old and young together, and raised a portion of the feed on the place, but I am sure I will have at least \$1.50 per head profit. I hope to do better when I get a better place and better facilities for taking care of the flock. —Market Basket.

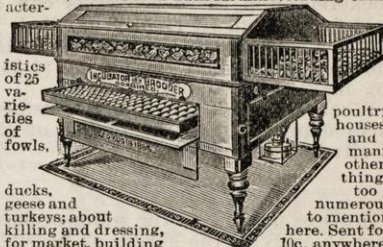
PROFIT IN ONE HUNDRED HENS.

We can make a net profit of \$2.50 to \$3.00 on each hen kept in a year, by the method so frequently described in these columns. To do that we want to get the pullets to laying in October (by November 1,) and then keep them laying steadily all winter, when eggs bring higher prices; then turn them off to the butcher in August and September, having a new crop of pullets to take their place. In this way we get about 175 eggs from each pullet in the year, and our average price for eggs by the year is a little better than 26 cents a dozen. Fourteen and a half dozen eggs at 26 cents is \$3.77; then the bird sells for 60 cents (alive), making a gross income of \$4.37; \$1.25 to \$1.37 will pay for the food she eats, leaving about \$3.00 profit. This is no fancy sketch, but is based upon the figures of several years; four consecutive years showing an average profit \$2.91 per fowl per year. The three rules of procedure for this result are:

1. Hatch the chickens early, say April 1st to 15.
2. Keep them growing steadily so the pullets shall come to laying in October.
3. Keep them laying by good care and good, sound, sweet food.

By this method the price received for the fowls when we sell them to

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-



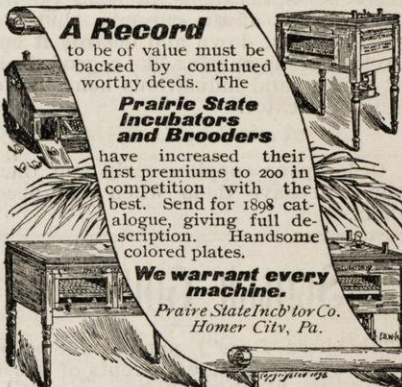
istics of 25 varieties of fowls, ducks, geese and turkeys; about killing and dressing, for market, building poultry houses and many other things too numerous to mention here. Sent for 10c. anywhere.

RELIABLE INCUBATOR & BROODER CO. QUINCY-ILL.

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 Incb'or Co.
Homer City, Pa.



HATCH CHICKENS BY STEAM— 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.

CIRCULARS FREE **SELF-REGULATING**



GET THE BEST!

Send 6 cents for Large Illustrated Catalogue full of Information for Poultry Raisers. Many Improvements. Don't purchase before you have investigated.

GEO. W. MURPHY & CO., Quincy, Ill.

the butcher swells the profit account, as it costs nothing (but the labor) to raise the pullets to replace them. Half the chickens hatched will be cockerels, and those cockerels can be sold for enough (if rightly handled) to pay for raising themselves and the pullets also, so that the pullets at laying maturity cost nothing.

Whether or not the poultry business pays depends upon the owner of the poultry.—Farm Poultry.

Get the poultry in the plum orchard just as early in the spring as possible. It is the best "constitutional treatment" for the curculio and gouger there is. Spraying is all right for an acute attack of the curculio, but to keep the pest down and destroy it entirely there is nothing like a good flock of hungry and industrious hens.—Live Stock Indicator.

Order your supplies early and then you will have them when you need them.

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.

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.

TRADE MARK REGISTERED.



K & C WHOLE WHEAT FLOUR

Copy-righted 1895.

Prevents and relieves Constipation and Liver troubles. An appetizing, nutritious Family Flour, for Bread, Gems, Griddle Cakes, etc. Unrivalled in America or Europe. Pamphlet and Sample Free. Ask dealers or write to Farwell & Rhines, Watertown, N.Y.



12-4 Year. MANHATTAN BLDG. CHICAGO. 10c 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



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.

READ THE JOURNAL OF COMMERCE

The official price current of
St. Joseph wholesale grocers.

\$1.00 PER YEAR

SWEET CLOVER SEED

(White)
25 pounds\$2.25
50 pounds 4.00
100 pounds 7.50

BERTSCH & FLIEMAN,
Holland, Mich.

ROOT'S GOODS

1898 Catalogue Free

Full of new things, including



Fences (Cleated Separators.) Plain Sections (Sections without bee-ways.)

Danz. Hives, Danz. Sections, etc. Comb Foundation

Clear as crystal and not liable to sag. Sold last year 90,000 lbs. Samples free.

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

Our agents for territory in the West and Southwest are, Jno. Nebel & Son, High Hill, Mont. Co., Mo., The L. A. Watkins Mds Co., Denver, Colo., D. M. Edwards, Uvalde, Uvalde Co., Texas.



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.

STURTEVANT'S

Poultry Foods and Remedies.

IMPERIAL EGG FOOD.

Most famous and cheapest Egg Food in the world as it does what is claimed for it.

1lb 50 cts.; 2½ lbs. \$1.00; 6 lbs. \$2.00; 10 lbs. \$3.00; 25 lbs. 6.25.

EGG MAKER.

An Egg Producer.

Trial size, 10 cts.; 2 lbs. 25 cts.; 4½ lbs. 50 cts.

POULTRY CURE.

A guaranteed Cure for all Diseases of Poultry.

Trial size, 10 cts.; larger sizes 25 cts. and 50 cts.

THANOLICE.

A Dust for the Destruction of Lice.

Trial size, 10 cts.; larger sizes, 25 and 50 cts.

CREO-CARBO.

A liquid Vermin Destroyer and the Best Disinfectant known. 50 cts. a can.

ROUP PILLS.

25 and 50 Cents per box.

For sale at Wholesale and Retail by Emerson T. Abbott.

St. Joseph, Mo.

We could not describe the great Mammoth Cave of Kentucky so that you would know just how it looks. Neither can we tell you all the good qualities of Campbell's Soil Culture and Home Journal. It has recently been greatly improved and enlarged; you must see a copy. Send to the Campbell Publishing Co., Omaha, Neb., for a free sample and you will want it for a year. It costs only \$1. We can send it and the Busy Bee both one year for \$1.00.

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.

QUEENS, Ready April 10th.

Untested, 60c., 6, \$3.00.
Tested, 80c., 6, \$4.00.

Bees by lb or nucleus cheap. Best honey gatherers

Price list free. **J. B. ALEXANDER, Hartford City, Ind.**



OLENTANGY INCUBATOR.

This Machine will hatch every fertile egg, so thousands testify. It is the best **Self-Regulating** machine made.

Brooders \$5.00. Catalogue free. Address, **GEO. S. SINGER, Cardington, O.**

"Intensive Cultivation is the Keynote to Success."

SUCCESS
waits on all who subscribe to

AMERICAN GARDENING

\$1.00 a Year. Every Saturday.

The Suburban Home and Country Life.

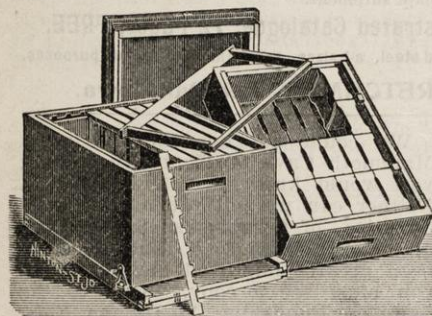
A Practical Guide to Gardening and Fruit Culture in the Open and Under Glass, Landscape Art, Forestry, Home Ground Improvement, Bees, Poultry, Birds and Dogs.

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

VALUABLE PREMIUMS TO EVERY SUBSCRIBER.

Send for Free Specimen copy showing Premium Offers and Cash Prizes, open to all,

American Gardening, P. O. Box, 1697,
NEW YORK.

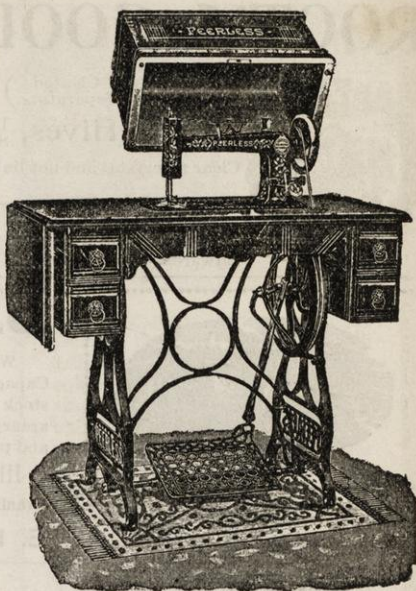


THE "ST. JOE" HIVE.

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.

DOVE-TAILED HIVES.

One body with eight frames, Hoffman, and one presser board, bottom, super with section holders, wood separators, etc., gable cover, including nails to make the same. Made of good white pine, and by first class workmen, in lots of five, 75 cents each. Write for price list. Emerson T. Abbott, St. Joseph, Mo.



THE PEERLESS MACHINE.

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.

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.

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?

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.

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.

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.

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.



IF YOU
WANT A **FRUIT JOURNAL**
THAT IS UP WITH THE TIMES SEND
FOR A SAMPLE COPY OF

OUR HORTICULTURAL VISITOR, KINMUNDY,
ILLINOIS.

THE REVIEW AT REDUCED RATES.

The Bee-Keepers' Review is \$1.00 a year, but, for the sake of getting it into new hands, and being able to begin the year with a large list, I will, until January 1, send free to each new subscriber a copy of "Adavnced Bee Culture, a 50 cent book of nearly 100 pages, that gives briefly but clearly the best methods of management from the time the bees are put into the cellar in the fall until they are again ready for winter—32 chapters in all. Those who prefer can have, instead of the book, twelve back numbers of the Review, the selection to be mine, but no two numbers alike. All who send \$1 now will receive the last four issues of this year free, and the Review will be sent to the end of 1898. If not acquainted with the Review, send 10 cents for three late, but different numbers.

Address W. Z. Hutchinson, Flint, Mich.

Gleanings at Reduced Rates.

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

\$1.00 Before Their 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.