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The White Mountain apiarist : the circle at home and the honey bee. April 1892

Groveton, N.H.: Aked D. Ellingwood, April 1892

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APRIL,

1892.



PUBLISHED MONTHLY

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Groveton, N. H.

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From 10 to 25 per cent
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from former prices. My forty page catalogue for 1892 gives reasons.

I offer a new style chaff hive at one half cost of other styles and just as good. This hive can be taken apart almost instantly and packed up in small space. It can be used on any hive.

Don't fail to get my 32nd annual price list. I mean business and am bound to sell as good as the best and at equally low prices.

Fifty Colonies

Italian bees, Nucleus colonies and Queens for

sale in their season at very low prices.

Address,

WM. W. CARY,

Coleraine, Mass.

Please mention the *Apiarist*.

Exchanges.

Wanted to exchange advertising space in the APIARIST for supplies or bees,

A. D. Ellingwood,
Groveton, N. H.

FOR SALE OR EXCHANGE. 15 Chau-tauqua hives with thick top bars and tin roofs two story, painted white, and as good as new, made by W. T. Falconer, Jamestown, N. Y. Will take a few colonies of black bees in box hives as part pay, also want a copy of *Mysteries of Bee-keeping Explained*. Quimby's first edition published.

F. H. Towne, Montpelier, Vt.

White Mountain Apiarist.

PUBLISHED MONTHLY BY

ALFRED D. ELLINGWOOD,
AT FIFTY CENTS A YEAR.
GROVETON, N. H.

ADVERTISING RATES are 10 cents per line for one insertion; for two or more insertions the rates will be as follows: 1 inch, 75 cents; 2 inches, \$1.25; one half column, \$2.00; one column, \$3.50; one page, \$6.00.

Editorials.

Happy and content is a home with "The Rochester," a lamp with the light of the morning.
For catalogue, write Rochester Lamp Co. New York.

Two new bee journals are announced.

THE AMERICAN BEE-KEEPER don't like to see the black bees defended.

T. G. NEWMAN has returned from his vacation and is again at the head of the A. B. J.

BEES are not lazy, if they do not work you may be pretty sure there honey.

ANYONE WANTING a 25 pound box of thin foundation will do well to write us for prices and particulars.

IN MAKING up our forms the article of Mr. Chas. H. Theis was by some chance separated one half of it being on page 8 and the remainder on page 12.

AT THIS WRITING the weather is cold and rainy and the outlook not so encouraging as it might be.

WE HAVE about 50 second-hand hives that are in very good condition, that we will sell for 75 cents each; they are a bargain.

DOES SUCCESS in bee culture depend as much on the kind of bees a man keeps as on the location and management?

WE HAVE on our desk Mr. C. M. Goodspeed's *American Club List* for 1892. Mr. Goodspeed has the newspaper clubbing business worked up to perfection, his prices being remarkably low.

WE WANT the *Apiarist* subscribers to write us their ideas in regard to what can be done to make the *Apiarist* more interesting or instructive. Suggestions will be gladly received from anyone. What special feature can we add to make it more desirable to you.

THE JULY NUMBER of the *Apiarist* will be devoted to "Queens," several thousand copies will be printed and it will be a valuable advertising medium for queen breeders. Send in your orders for space now.

WEAK COLONIES can be built up strong by feeding, say, half a pint daily. This will cause them to build up rapidly, and should be attended to before the season is too far advanced.

Favors the Blacks.

Cabot, Vt., May 5, 1892.

A. D. ELLINGWOOD,

Dear Sir:—I have received several copies of your Journal and I find it very interesting and instructive. I also recieved a copy of the report of the Vermont Bee-Keepers' Association, which was very welcome. I have been a bee-keeper for 25 years; have only ten colonies now, had five starve the past winter; may peace be with them. They were the Italians, and all I had of that race, and it will be the last; the old black bees are the bees for this climate, they stand the test better than any other race in cold Eastern Vermont.

I find by reading the American Bee Journal that there are a good many in favor of the black bees. I am glad to see many speak in their favor, and hope they will continue to do so for they are a very valuable race of bees, and ought not to be treated as they have been.

J. L. Shaw.

Notes.

ON VERY COLD nights it is well to throw a blanket or something else over the hives to help retain the heat.

WHEN OPENING the hives to look at the bees, do it very carefully so not to jar them. When the bees are handled carefully there is very little danger of stings.

DECAYED ELM makes the best fuel for the smoker. It gives a good smoke and lasts fairly well.

DO NOT USE dirty sections for your comb honey. It pays to buy new clean sections every time.

SAVE ALL YOUR small pieces of comb, foundation or wax in any shape; wax is worth 30 cents per

pound and it does not take long to collect a pound.

IN APRIL and MAY, the bees will consume six or seven times as much honey as in December. Brood rearing requires a large amount of honey.

ALL MOTHS should be carefully brushed from the hives now as they may mean death to the colony later.

DON'T let the bees get to robbing; keep the entrance well contracted.

News Column.

This column will in the future be devoted to news, gossip, etc. We especially invite all our friends to help make this one of the most interesting departments of the *Apiarist*.

THE CANADIAN BEE JOURNAL is treating it's readers to some large portraits of Canada's more prominent bee men in each issue of that valuable journal.

M. E. HASTINGS, New York Mills, N. Y. comes out with a new Lightning Ventilated Bee Escape. We cannot see why it will not work well.

CHAS. D. DUVAL's circular and price list of Bees and Queens, just came to hand. It is an odd little affair. Mr. Duvall is proprietor of the "Linden Apiary."

Spencerville, Md.,

SEND IN YOUR ITEMS for the news column. We want to devote nearly two pages to short newsy paragraphs, and we invite every reader of the *Apiarist* to contribute something.

GEO. W. PENN, St. Louis, Mo., is to be the editor of the *National Bee Gazette*.

THE AMERICAN BEE-KEEPER devotes about a page to the review of current literature; this is a little out of the *bee line* but is interesting.

W. DILLON, Middleburg, N. Y. has invented a new swarm-hiver,

T. F. BINGHAM has been granted another patent on his bee smoker. The patent is on a new fire plate and nozzle.

Mr. J. C. POND of North Attleboro, Mass. has been suffering with La-Grippe.

MR. GEO. W. YORK is now assistant editor of the *American Bee Journal*. Mr. York has been in the employ of T. G. Newman, the publisher of the A. B. J., for several years and is well fitted to occupy the editorial chair.

THE NATIONAL BEE GAZETTE is the name of a new bee journal that will make its first appearance May 7. We wish it success.

T. J. OTTERSON, Suncook, N. H. will begin the season with 8 colonies of bees in excellent condition.

WE WONDER what has become of "Kit Clover." She is an interesting writer and it seems rather too bad for her to keep silent so long. Should be pleased to hear from her through the *Apiarist*.

THE BEE AGE is a new bee journal that will make its first appearance about the first of May. B. Taylor will be the editor, and it will be published by the Western M'fg Co. Spring Valley, Minn. Monthly, 50 cents per year. We wish the new journal success.

MISS MARY HARLOW, Windsor, Vt. writes that her bees are not springing out very well, a good many of them are dying off.

SEND IN your items for the news department. We want two or more pages devoted to this subject each

SEALED COVERS VERSUS POROUS ABSORBENTS FOR WINTERING.

ELSEWHERE we publish several communications in favor of upward ventilation and porous covering as against the sealed-cover idea. As nearly as we can discover, both from the letters published and those unpublished, the writers have not tried both the sealed cover and the absorbing cushions side by side for a series of three or four years. All through the *winter* we could discover no practical difference in our apiary; but this *spring* there is a slight difference in favor of the sealed-cover colonies. Those under sheets of glass seem to be stronger and more lively than those under the absorbing cushions, and they are the first to fly out. At present, however, we are seeking for more light, and at present are not prepared to advocate either method as being the best. It may take three or four years of careful experimenting on the part of a good many to decide the question. Francis Danxenbaker, of Washington, D. C. in another column, the inventor of the Dual Hive, and the one who suggested to us the adopting of the dovetailed corner for the Dovetailed hive, you will notice says he has tried the sealed covers for twenty years, and that he has also tried the porous covering, with disastrous results. Now, who is there, besides the Dadants, who have tried the sealed covers and porous covering side by side, and found the latter as good as the former? [*Gleanings*.]

Who Can Keep Bees?

In order to answer this I might ask who *cannot* keep bees, for we have men of all professions in our ranks—Ministers of the Gospel, Doctors, Lawyers, Professors of Colleges, Me-

chanics and farmers, and in fact about all classes of well-to-do and intelligent people are found in the bee-keeping fraternity. Any one undertaking the business can succeed if they are observing and careful, and above all industrious and determined to succeed. Such a person will most surely succeed. No one should undertake the business thinking it will take no work, for he will be badly mistaken. He must expect to work with energy and perseverance early and late through the busy season and be of that kind of metal that can stand some degree of misfortune and disappointment, as it is like most other occupations; it is not without its drawbacks, misfortunes and disappointments. It takes men of strong will power and determined perseverance to make a success of bee-keeping, or any other business, and it is only this class that will gain success in any undertaking. There are very few persons who are not in a position to keep bees. All farmers, mechanics and laborers, if they have but a small lot of ground, can keep a few colonies of bees; even in the heart of large cities, many persons keep bees. Mr. C. F. Muth, of Cincinnati, Ohio, living in the central part of the city keeps his bees on top of his store room and he is one of our successful bee-keepers.

A Beginner's Experience.

BY E. B. WHIPPLE.

The colony mentioned in January APIARIST I will call No. 1. Another, purchased later, No. 2, although it was the only remaining decendent of bees I had owned before and kept on the "let alone plan."

No. 1 built up rapidly, being transferred to eight L frames, so that when the wild plum began to bloom in February they soon filled up all vacant places and the combs began to whiten. Not getting supplies I had sent for, I placed another story of empty frames on top; but bees refused to go up and start new combs from top bar of frames, preferring to build upward from below. How I did wish my foundation would come along as I watched the depot every day. Finally I went to a neighboring bee-keeper and purchased ten cents worth of empty comb; carefully cut it into half inch strips and fastened them to the under side of top bars with melted beeswax. As these frames were placed in the hive one by one as prepared my little pets quickly took possession, hanging down in chains nearly to the bottom bars. In a few days they had every frame filled down with beautiful white comb.

No. 2 was already on frames; but such frames, and such manipulations as they had been subjected to! I need not describe them here, but suffice to say that I was reminded that A. I. Root places ignorant bee-keepers among the worst enemies of the honey bee. I brought them gradually into a little better shape and when I had two stories crowded with bees, brood and stores and a queen cell in each story, I divided them by moving one story to a new location, and giving each another story of empty frames.

No. 1 threw off a strong nature

swarm when I was obliged to hive on empty frames as I could get no more empty combs and supplies were not at hand.

I now had four colonies which I enclosed with barbed wire fence and on the last days of March took my first experience in progressive apiculture and started north. Reached my home in Hillsborough April 4th, found the bees here had wintered well in their old box hives, enclosed in rustic outside cases two feet square and packed with chaff. When I reached home about noon they were flying briskly and bringing in heavy loads of pollen.

One colony, purchased late last fall for \$1.00 and fed twenty pounds sugar syrup, they being destitute of winter stores, were also in good condition, so I commence the season with three colonies of black bees.

Hillsboro', N. H.

Profits of Bee-Keeping.

There is abundant proof that the keeping of bees as viewed from a dollar and cent standpoint recommends itself as a business of no mean proportions, when we take into consideration that it requires no very great amount of capital comparatively to be invested in the business. Neither is the labor very great except for a few weeks during the busiest part of the season; therefore I know of no occupation that returns so great a percentage for the amount of capital and labor employed. I do not wish it understood that it does not require hard labor. The specialist with his hundreds and some with thousands of colonies will have quite a busy time during the honey season, and will have many days and weeks of hard and some toil; but it will be healthy,

pleasurable work, requiring the exercise of both brain and muscle, so that he will be benefitted both physically and mentally, and for a man to be happy and contented he should have employment for the mind as well as the body. I do not believe that every person will make a success in the bee business. The careless, indifferent, indolent and heedless man will most surely make a failure in this business just the same as he would in any other occupation.

The following, taken from Prof. Cook's Manual of the Apiary, gives some facts in reference to the profits of bee-keeping. "An intelligent apiarist may invest in bees any spring, in Michigan, with the absolute certainty of more than doubling his investment the first season, while a net gain of four hundred per cent brings no surprise to the experienced apiarist of our State. Nor is Michigan superior to other states as a location for the apiarist. During the past season, the poorest I ever knew, our fifteen colonies of bees in the College apiary have netted us over \$200. In 1876, each colony gave a net return of \$24.04, while in 1875, our bees gave a profit, above all expenses, of over 400 per cent of their entire value in the spring. Mr. Fisk Bangs, who graduated at our College one year since, purchased last spring seven colonies of bees. The proceeds of these seven colonies have more than paid all expenses, including first cost of bees, in honey sold, while there are now sixteen colonies as clear gain, if we do not count the labor, and we need hardly do so as it has in no wise interfered with the regular duties of the owner. Several farmers of our state who possess good apiaries and good improved farms, have told me that their apiaries were more profitable than their farms.

Who will doubt the profits of apiculture in the face of friend Doolittle's experience? He has realized \$6,000 in five years, simply from the honey taken from fifty colonies. This \$6,000 is in excess of all expenses except his own time. Add to this the increase of stocks, and then remember that one man can easily care for one hundred colonies, and we have a graphic picture of apiarian profits. Bee culture has made Adam Grimm a wealthy man. It brought to Capt. Hetherington over \$10,000 as the cash receipts of a single year's honey crop. It enabled Mr. Harbison, so it is reported, to ship from his own apiary eleven car loads of comb honey as the product of a single season. What greater recommendation has any pursuit? Opportunity for money making, even with hardship and privations, is attractive and seldom disregarded. Such opportunity with labor that brings, *in itself*, constant delight, is surely *worthy of attention*."—From Vandruff's "*How to Manage Bees*."

Honey Dew as Winter Stores.

BY CHAS. H. THIES.

Mr. Editor: With your permission, I should like to say a few words to the readers of the *Apiarist* on the above subject. Many and perhaps most of the leading bee-keepers consider honey dew as a poison, as it were to the bees. I have at different times wintered my bees with the above as winter stores and with no bad effect at any time; this past season it has been almost a universal crop all over the United States, and very much so in Southern Illinois, yet I have wintered all of my bees, both strong and weak colonies as well as four or five nucleus colonies, the latter as an experiment, and today, April 20th, all

are in first class condition (no loss) and breeding nicely with the exception of one, which lost their queen, and was not noticed until a fertile worker was at work; now after several experiments on above, I have come to the conclusion that it is not so bad for bees as is usually thought. I should like to hear from other readers of the *Apiarist* what success they have had with the above as winter stores; I find that when bees have poor honey to winter on, all that is usually required, is to give a little more attention to them in preparing them for winter. Bees, with the best of honey or even sugar stores, if allowed to become damp or perhaps wet and if not properly ventilated, usually die before spring, and if they should live, they have become so weak and disheartened, that it will require all of the honey season to build up in, then the beginner wonders how it is that others have tons of honey and he or she has to feed that colony for winter. For example, in the early spring when every opportunity should be taken to examine every hive, and supply them with whatever is needed, they are left to take care of themselves, and this is about what happens; when honey begins to come in the bees begin to breed rapidly, that is in proportion to their strength; so when we get a cold rain storm, a large portion of their brood is chilled and carried out dead, and finally at about the close of the honey flow, they are just about ready to store a little surplus, but the honey has ceased, for the time being, the bees are again out of honey and dwindle down to about a pint; then if you have a flow in the fall, your bees must again build up, and again the honey season is over and your bees are in pretty fair shape but must be supplied with winter stores, if you want them to live.

Introducing Queens.

Should I attempt to give all the directions and various methods that have been tried and recommended from time to time it would almost make a book within itself, as well as confuse the average bee-keeper. As this book is intended for the "masses," I will only give a few plain, practical methods of introducing queens, and try not to confuse the average reader, as it is only through practical experience that we can become experts at introducing queens. Queen dealers send queens by mail to most all parts of the world in cages called queen cages. These cages are usually so made that they answer as an introducing cage.

Now the colony we wish to introduce the queen to must be made queenless. It is usually considered best to let them remain queenless a few hours until they become aware of the fact and then give them the caged queen which can be laid on top of the brood frames if the weather is warm, or the caged queen can be placed between two brood combs, which is rather the best plan. It usually takes 24 to 48 hours before the bees will accept the strange queen; sometimes it will take three or four days, and in extreme cases it will take a week. The queen should not be let out until the bees become friendly toward her, which we have to judge of by their actions. So long as the bees cling to the cage in a close cluster, seemingly to try their best to get into the queen it is not safe to let her out. We must wait until they are walking leisurely about over the cage, not paying any particular attention to the queen, and then we can let the queen out with safety.

LETTING THE QUEEN OUT.

When you think it safe to let her out, have your smoker in readiness, and be sure to get the bees under subjection. Now open the cage a little, just so the queen will have plenty of room to crawl out, and watch closely how the bees behave toward her. If they attack her, or "ball her," you should cage her and wait another day.

By "balling," I mean the peculiar way the bees have of attacking a stranger queen, by gathering about her in a dense mass and enclosing her in a ball of bees, often as large as a hen's egg or small walnut. To get the queen released from the ball we have only to give the bees a liberal supply of smoke and then we can pick up the queen and cage her again. In picking up a queen we should not take hold of her body, especially her abdomen, as we would be pretty sure to injure her; we should pick her up by the wings. If a colony of bees refuses to accept a queen after two or three days, we should look through the hive and destroy all queen cells that they may have started, as this one thing alone will often cause them to refuse to accept a queen; and if they still continue obstinate I would remove all their brood from them until they have accepted the queen. It is more difficult to introduce a queen during a dearth of honey than at other times.

From "How to Manage Bees."

\$1.50 FOR ONLY 50c.

"How to Manage Bees," by W. S. Vandruff, is a book of over 200 pages, and is an exhaustive treatise on the honey bee. The price is \$1.00, but we are going to give a copy free to any one sending us fifty cents to pay for a year's subscription to the *Apiarist*.

Take advantage of this offer now.

A. D. Ellingwood, Groveton, N. H.

How to Rear Bees in the Spring.

BY R. C. AIKIN.

In our last we said the first general examination would be last of March, or first of April. Of course the date depends on the weather; whether the spring be early or late; but it should be when the weather is warm, and after the bees have flown freely, cleaned house, and gotten things in shape; i. e., started brood and settled down to business.

We think it pays to unite some in the spring, if there be queenless colonies. Give such bees to the colonies that are most in need of bees. I would not unite colonies having queens, so long as such colonies can be preserved, even if it be necessary to give bees from some strong colony. The colony that has too few bees to build up of itself is too weak to care for brood given it, so we would give bees and not brood.

We unite colonies by placing one above the other, with a quilt between, saving a hole in it; sometimes without a quilt, by shaking bees in front and allowing them to run in; or by letting them get so cold they are glad to get anywhere 'tis warm, then dump them right in; also by placing the combs they are on, in one side of the hive of the colony they are to be united with.

If more care is necessary, rob them of combs and stores, and leave them so from half an hour to half a day, or more. After this they will perform as if robbed of their queen, and may be united direct in twenty minutes to half an hour. The amount of bees, the kind of day, time of day, kind of hive, etc., determine what plan I use.

A record is kept with a lumberman's crayon (a heavy lead pencil will do) on the front of the hive, thus: 3-20, 4-3-8, which means March 20th, bees 4,

brood 3, honey 8, graded on a scale of 10. After the date the first figure tells how many bees. 4 is 1 point below an average, the proportion of brood a little less, while honey is abundant.

The standard by which we grade is our estimate of what they should be at that date. A colony graded 5-5-5, in May, does not mean the same amount of bees it would in March, but several times more. The amount of bees, brood and honey is graded in proportion to what it ought to be at the date of entry. After the day's work is done, a few minutes work copies the record into a book, with enlargements if necessary such as, "united with," "queenless" etc., as the case requires.

After this work is done and all colonies are covered up again snug and warm, with stores to last them five or six weeks, but little remains to be done in the yard for three or four weeks, except occasionally looking after the weak ones to see that they are not robbed. However, there is one other matter that demands our attention very soon after spring weather comes. Our location seems to be short in pollen, and when brooding starts in earnest, the bees visit mills, feed-boxes, granaries, in fact anywhere almost that they can get a floury substance to substitute for pollen. They will hunt it out almost as quickly as honey, causing horses to leave their feed, and even making holes in grain and flour sacks for it.

So, both to avoid the nuisance, and to supply their needs, we feed chop or flour in open troughs or boxes in and about the apiary. But just so soon as natural pollen can be had, they cease to take the chop. Our first pollen is from cottonwood bloom.

This practically covers our management up to about May 1st. With the closing of April we do not expect any more losses. The colony that

pull through. May 1st usually does not pull through at all. The beginning of May should find each colony with three or four combs of brood, and bees in proportion. We expect the honey flow to open about June 15th to 20th, so we will have forty-five or fifty days to rear bees for honey gathering.

We now examine each colony again to ascertain the amount of bees, brood and honey. If any are now too weak for rapid broodrearing, they should have help. If the weak condition is the result of a poor queen, but little can be done for them until a young queen can be raised. If the queen be good, we give the colony some bees from one that can spare them. We now strive to have every queen do her best. We continue the chaff or other protection. A colony protected can cover more brood than one not protected, and if the queen will do her part, we get more brood.

We have practically no honey before June 15th, and have to depend on old stores for broodrearing, so the stores go as if by magic, and care is necessary to avoid a shortage in honey and cessation of brood-rearing. A prosperous colony will consume from forty to sixty pounds of honey from fall to honey flow again, or say till June 15th. If a colony crowds the brood and honey, we would exchange a comb of honey with some colony that has empty comb. We think we get brood faster if the queen can always have plenty of empty cells, so long as there are stores enough in the hive.

We endeavor to keep down drone rearing. It costs too much in honey and bees to raise a lot of drones. Six inches square of drone brood is so much loss of honey consumed. Rather have the hive just that much smaller, and save the honey that would be converted into drones, and

save their nurse bees for honey gathering.

Some object to having a large force of workers at any time previous to the flow. I believe that we can afford to board a whole hive full of extra workers, even for three or four weeks, and then be well paid if we don't get more than a week's work out of them. So after May 1st we get bees, and keep getting bees. The more bees we get the happier we are.

Sometime in May we begin to spread brood. We do this when making our regular rounds of examination, which is about every ten or fifteen days. Should a colony spread its brood nest crosswise the combs, I change ends with each alternate comb, causing them to fill out to the end. After that, I spread the other way. However, a word of caution here. No one should spread brood indiscriminately, and before doing very much of it, one should have practical knowledge of when, and how it should be done. Go slow until you know you can do it right.

This line of management is followed up to near the honey flow. In fact, quite to it. Some things remain yet to be done before the flow comes.

These will be discussed in our next.

LOVELAND, Col.

P. S.—I forgot to say that we clip all queens' wings in the earlier season while they can be more easily found.

Also remove chaff protection last of May or first of June.

Review.

Success in bee culture depends on the *man*. Energy, industry, and economy are qualities that he must possess. The boy who saves his pennies to invest in a bee-book, and then stays at home with his bees, rather than sit around the corner grocery, will make bee-keeping a success.

No wonder that many become disgusted with the business, others read the report of some good bee-keeper and grasp the idea that he must have a wonderful location, pull up stakes and go to Colorado, California or some other place, next door neighbor to one of the successful Apiarists, but to their distress, with no better success, and then they are sure that bee-keeping is a failure, not profitable, which with them it certainly is not. Some four or five years ago I took a run through Colorado, Arizona, and spent the winter in California where you can see bees working on the orange blossom on Christmas day yet bee-keepers there as well as here must be wholly in their business if they are to make it pay.

Mr. Editor, I have read the APIARIST for some time, and must say that I am well pleased with the journal, and if you should chance to pick up one of the copies of its birth and one of the present time, I think a wonderful improvement will be seen.

I should like to have said a few words in regard to the races of bees, but think I had better close for this time, and if desired will give my experience in that line at some other time. I wish the APIARIST a broad and successful field.

Steeleville, Ill.

Bee Notes.

WHAT THOSE FOUR COLONIES OF BLACK BEES DID THE PAST SEASON.

Now that the busy cares and labors of the season are over, and winter is upon us, with its short days and long evenings, we have ample time for retrospection. I will now fulfill a promise I made last spring, which was to report the result of my four colonies of black bees.

I reported them in May as storing an unusual surplus of honey from the maple and willow blossoms. Since that, the report from all sections of the state has been a very poor season for honey. I have claimed that our natural pasturage for bees, in the older parts of the state, is very poor; and have urged upon the bee-keepers the importance of sowing alsike clover, buckwheat etc., as extra forage for their bees. Perhaps my alsike and buckwheat contributed quite largely to the success of my bees, the past season. White clover lasted only about two weeks. The alsike comes into bloom with the white clover and will last six weeks. Notwithstanding the bad weather, when it was suitable, if only for a few hours, my alsike was covered with bees. All bee-keepers know that buckwheat is not worked to any amount after 10 A.M.

I am quite well pleased with the workings of my black bees for the past season which has been as follows:—

Colony No.1,	97½	lbs.	surplus	honey.
No. 2,	66	"	"	"
No. 3,	26	"	"	"
No. 4,	83½	"	"	"

Total, 273

Average 68½ lbs. per colony.

Besides the above, I made three artificial swarms, by taking from the old colonies, 16 sheets or frames of brood and honey, and the first made swarm gave me a surplus of 29 lbs. honey. Had I not killed the queen in No. 3, just as white clover was blooming, and raised a new queen, the result would have been much better. I killed the queen because she was old and did not keep her combs stocked with brood. My bees have gone into winter quarters in good condition, with from 20 to 40 lbs. of honey each. Have fed them any since May.

BEE-KEEPER

Agricultural Letter.

WHAT HAS BEEN DONE IN CONGRESS
AND AT THE NATIONAL CAPITOL
DURING THE MONTH, FOR THE
FARMER, STOCK-RAISER,
ETC.

(REGULAR CORRESPONDENCE.)

During the month two of the free trade measures, following the line of attack on the McKinley Tariff Law, have just passed the House. The Woolen Bill received a vote of 194 to 60; the Cotton Bagging Bill was passed by 166 to 45. I see that the *N. Y. Tribune* predicts that these measures will never pass the Senate, and they of course will be vetoed by the President. I understand the next measure in this direction will be to repeal the duties on sugar. It is reported that Vermont will produce only one-fourth of her usual crop of maple sugar this year, at a loss of \$1,000,000 to her farmers. A large sugar refinery has been organized near New York City to compete with the Sugar Trust which now practically controls this business. I have talked with the most extensive sugar-raiser in Texas, who was here during the week, and he thinks there is money in the business if Congress will leave the laws as they are now. The request of the late Beet Sugar Convention for an appropriation of \$50,000 for a school of instruction in this art, has been referred to the Senate Agricultural Committee, but they have not reported thereon as yet.

The Behring Sea controversy has happily been settled and there is no immediate danger of further trouble or dispute in this direction. Executive Clerk Young has been removed from the Senate for alleged disclosure of the transactions of secret ses-

sions. That body has passed a bill authorizing the Secretary of Agriculture to fix a standard of classification for wheat, corn, oats, rye and barley, which standard shall prevail in contracts unless otherwise agreed. Mr. W. M. Howard of Bethlehem, Pa. suggests that the Government adopt a "wage unit" of 60 lbs. of good flour or its equivalent. The suggestion has received the approval of numerous eminent political economists, and will be laid before Congress. The Agricultural Department has issued a bulletin containing the following figures showing the production of corn and wheat for the last three years:

Bushels in 1889,	Corn:	2,112,892,000
"	1890, "	1,489,970,000
"	1891, "	2,060,154,000
"	1889, Wheat:	490,560,000
"	1890, "	399,262,000
"	1891, "	611,780,000

The Farmers' Alliance has opened a campaign headquarters in this city, and will commence the publication of a party organ to be known as the *National Advocate*.

Senator Pepper has introduced a bill to establish an experimental station for testing electrical power as applied to the driving of agricultural machinery. Senator George of Miss. has introduced a bill to refund to cotton-producers the internal revenue tax levied thereon. Bills have also been introduced to enable the Secretary of Agriculture to promote the manufacture of fabrics from fibrous plants, and to establish land coin banks; and Senator Paddock wants an appropriation for investigations and tests of American lumber. The bill totally excluding the Chinese from this country has passed the House by an overwhelming majority and will probably pass the Senate before this letter is printed.

Bee Feeding.

BY PROF. CHAS. L. STRICKLAND.

This is a process that a great many bee-keepers have to comply with at one end or the other of a great many seasons; some will feed to prevent starvation, others will indulge in stimulative feeding in spring to have plenty of bees on hand for the expected harvest. But of late years, the expected harvest often contains more expectation than reality, proving disastrous both to pocket and mind.

But here is my plan; I like a plan rapid and easy, one where the bees are not exposed, where no jars or jolts occur to irritate the bees, where the feed is close, and directly over the bees, where the warmth will act on the feed, and very little bee travel is needed to get it when wanted. I generally use cheap two quart basins, others can use what they like; in these basins I put enough small blocks to fill or cover the tops when full of feed. In this way the bees can rush all over the feed without danger. It don't matter if the dish is full of bees at time of feeding, the blocks rise as the basin fills, and up go the bees. I now place two pieces of thin wood across the brood frames; on these I place the basin, then I put in a board fitting the story bee tight, about one inch above the basin, when resting on the frames. In this division board I make a small hole directly over the basin inside; I have a small block to cover this hole when not in use.

Now when you wish to feed, simply raise your hive cover, move the small blocks, pour in the feed, and you are done. Have a can holding so much feed, and you always know what the basin inside contains; no daubing or spilling. If any one has

a better way of feeding, with less danger of robbing, and less work, let us hear about it.

Peabody, Kan.

LOCATING AN APIARY.

In locating an apiary it will be well to remember that hives should never be placed against buildings or old fences. Always leave plenty of room around the hive to stand while working with the bees; and bear in mind that the intense heat from the south side of a building is liable to give them the swarming fever. They should never be placed where horses or cattle constantly pass; for at times, when honey is scarce, the disagreeable odor provokes an attack, and, if permitted in the same inclosure, the stock are in danger of their lives should they overturn a hive in grazing or rubbing against it. No grass or weeds should be allowed to grow within two feet of the entrance of any hive. Much time is lost by bees falling in the grass. They may become chilled by rain or dew in cool weather, or fall victims to toads or spiders, and returning queens are liable to be lost.

TO PREVENT STINGS.

To prevent stings, use the smoker gently. Work with the bees during the warmest part of the day and during sunshine. Do not frighten the bees by jarring the hive, but *make haste slowly*. Bees do not like quick, nervous movements; but slow and graceful movements take well with them. Frequent handling will do wonders toward making them peaceable; and if properly handled they are not inclined to sting one more than another.

See

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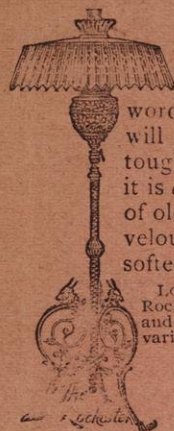
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