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NEW SERIES
Vol. I, No. 6, 1894. September.



Bee-Keeper

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C. A. OUELLETTE, TILBURY CENTRE.

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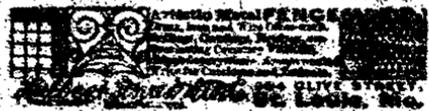
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NEW SERIES
VOL. 1.

TILBURY CENTRE, ONT., SEPTEMBER, 1894. No. 6.

At last the welcome rain; bees stored some honey from buck wheat and golden rod.

Examine your hives carefully in preparing for winter and see that there are sufficient stores.

Strange it is that some honey producers are so careless in preparing their wares for market. A short time since the writer saw comb honey offered for sale which had been produced without the use of separators. The sections were run together and in one case several sections were joined diagonally. The merchant paid 9c. and was sorry for his bargain, as it was so difficult to handle. Again the sections were badly travel stained. The same honey had it been produced by means of separators could easily have brought the producer from 12 to 15c., Separators cost 35c. per 100, a fraction over 2c. for a 28 section super. 28 sections at an increased average price of say 4c. is equal to \$1.12. Subtract the price of separators 2c. and we find a clear gain on a single super of \$1.10. It pays to be progressive.

In a former number of this journal bee-keepers were advised to endeavor to create a home market for their comb honey. What was true then is true now. Comb honey should if possible be marketed in the vicinity in which it is produced. Fair, square dealing together

with a good article should create a home demand and thus vexatious losses, middlemen's profits, etc. etc., ad infinitum may be avoided. True, there are honest and reliable commission men and comb honey properly packed in shipping cases may be sent long distances and the loss thus reduced to a minimum but all things considered the producer of comb honey should sell in his own market, if he has one, if not he should create one.

Taking a general average of all the reports received the honey crops this year will fall greatly below the average. This taken in connection with the fact that Canada imports more honey than she produces should cause stiff prices to rule. Don't be in too great a hurry to sell and when you do sell, see that you get a good price.

My First Experience With A "Wells" Hive.

Last autumn I, like many more, had the "Wells" craze on, and I thought I should like to try it, so I made a hive to take twenty-two frames in the brood nest, and stocked this from two hives that had queens of '93, besides plenty of bees and stores. I packed them well down for winter, and in the spring of this year stimulated them with syrup and the bees increased very fast—indeed, so fast, that by the middle of May I was obliged to give them a super of

draw-out combs in standard frames spaced with the new "wide ends," eighteen of these filling the upper chamber. They got well to work in this super, and I was obliged to add another eight on frames above, and this was very soon filled with bees. The roar in front of stock hive at night was something tremendous, and the hive looked like a gigantic dog kennel with its three tiers of frames and roof. The weight of honey from the first super taken off, when extracted, was 120 lb., and from the second super, 63 lb., making a total of 183 lb. Not having touched the honey in brood-chamber, I call this not a bad "take," Messrs Editors, and I think you will say the same, considering this season. I have compared notes with my single hives, and my best hive yielded 73 lb. The "Wells" has not swarmed, and is at this time in splendid condition. I mean to go in more for Mr. Wells' system, and tender him many thanks for introducing it to us bee-keepers and the public. It matters not a jot to me whether the hive is called one or two stocks, if (as I have proved) it works well. I think it answers better for extracted than sections, as the bees are less likely to swarm.—A Nicholls, St. John's Wood, Hazlemere, Bucks, England.

Change of Date N. A. B. A.

The following letter from President Abbott will explain itself:

"In order to let all bee keepers who can take advantage of the "Harvest Excursion" rates which will be given on October 9th, we have concluded to change the date of the meeting to October 10-12. The rate will be one half fare plus \$2.00. These rates apply east of the Missouri river only. Ask your railroad agent about them. Special rates of one and one-third fare will no doubt be secured in the territory covered

by the Western Passenger Association. These will be announced later, if secured. Agricultural papers will please call attention to the change of date.

EMERSON T. ABBOTT, President.

St Joseph, Mo., Aug. 25, 1864.

It will be noticed that the above rate favors those at a distance, while those living near St. Joseph will receive little or no benefit from it.

"Expenses are sometimes profitable—saving is sometimes extravagance." This is another of Bro. Hutchinson's epigrammatic sayings, given in the July Review. He has been guilty of such things several times lately.

Honey=Bees and Horticulture.

American Bee Journal.

BY H. C. FINNEY.

The honey-bee is made the scape-goat for a good many ills that horticulture is heir to, as well as depredations from the numerous and natural enemies of fruit. The honey-bee is one of the greatest benefactors and friends the horticulturist has, fertilizing bloom that would otherwise remain unfertilized. It has been frequently and fully demonstrated that in districts where there were large orchards unvisited by the honey-bee, they were much less productive than orchards in close proximity to an apiary, all other conditions being equal. In a Massachusetts town, some years ago, a number of citizens petitioned the council for an ordinance prohibiting the keeping of bees within the city limits, because they sucked the honey from the bloom, causing injury to the full and perfect development of the fruit. The prayer was granted, and the bees had to go. Result: The next year the orchards were filled with bloom. The wise ones predicted an unprecedented crop, now that the bee was disposed of.

Harvest time came, but there was less of fruit by half than in the preceding years. Year followed year of almost failure, then the cry went up, "Bring back the bees!"

Nearly every community has some visting who has suffered pecuniarily from the ravages of the honey-bee! Birds, grasshoppers, nor insects ever molest; they have a sort of tender regard for his ripening fruits, in fact, are never seen, could not be enticed to partake, no, sir; but the accursed honey-bee (perhaps an offspring of that Massachusetts bee) swoops down upon his vineyard, scores and lacerates, bites and tears the ripe clusters from bottom to top, leaving them a bleeding mass for wasps and thrips to gorge upon! He relates his woes and losses to sympathizing friends and they condole with him in his misfortune, and pass resolutions to the effect that the bee is a mighty mean animal, and the man who keeps him is a worse one, and ought to be prosecuted for maintaining a nuisance!

Now, for the facts: It has been repeatedly demonstrated that it is impossible for a honey-bee to puncture a smooth-skin fruit, and any one will take the trouble to examine the structure of one, can satisfy himself of the absurdity of the thing. Experiments have been made all over Europe, as well as this country, and yet not a single case has been found where the honey-bee punctured the fruit. Yes, sir, they will eat or suck the fruit after it has been punctured by wasps or thrips, but not before. I have a little experimental station of my own, and invite all who feel disposed to visit it, and satisfy themselves in this matter of fruit eating.

To make a practical test of the theory of puncturing fruit, I selected bunches of the ripest and sweetest grapes, placed them on the frames over the brood-chamber in the hives where the bees could have free access to them. This

was three weeks ago. The grapes are there to-day, and untouched. The bees run over them, but pay no more attention to them than they would to so many marbles. I will guarantee any one immunity from stings who may wish to verify this statement, and satisfy himself.

There are several brother bee-keepers in this vicinity who have been to considered expense trying to build up an industry that will partially fill a long felt want, viz.: A pure article of honey, both comb and extracted. It is an industry that should be encouraged instead of discouraged. Apiculture and horticulture should go hand in hand; the field is large and inviting, and by attention and energy will return fair profits, I have heard the honey-bee maligned and misrepresented, so wrongfully accused of mischief that belonged elsewhere, that I raise my voice in its defense, and in behalf of my brother bee-keepers.—Council Grove, Kans.

How I Make Fly Paper.

(No patent.).

STICKY FLY PAPER.

MAS. A. L. HALLENBECK.

One pint castor oil.

One-half pint honey.

One and one-half pounds resin.

Heat the oil and honey together; when hot add the resin: stir till all is dissolved and thoroughly mixed. Spread on paper, and place where flies congregate. It makes no mess, and all flies stick fast. Two sheets of paper may be placed together, and, when wanted, pulled apart by warming a little by the fire. It will not dry up for a long time. Enough may be prepared at one time to last all the season. The preparation can be kept in any covered dish, and used when wanted.—P. B. K.

THE PRIONIDAS CRISTATUS OR
WHEEL BUG AN ENEMY
TO THE BEE.

OFFICE OF MISSOURI STATE BOARD OF
AGRICULTURE, COLUMBIA, MO.
PROGRESSIVE BEE KEEPER

Higginsville, Mo.

Gentlemen:—

Mr. W. A. Ditson, of Hutton Valley, Mo., forwarded to this office a large and beautiful specimen of a bug which he had that day discovered eating his bees, and asks that its habits and history be reported through the PROGRESSIVE.

This state having no entomologist, and not being familiar with "bugology" myself, I forwarded the specimen to Miss Mary Murtfeldt, of Kirkwood, Mo., who is authority on these subjects, and who has kindly furnished me the enclosed answer for your paper.

Very respectfully,

J. R. RIPPEY, Sec'y.

KIRKWOOD, Mo., Aug. 9, 1894.

Mr. J. K. RIPPEY,

Sec'y State Board of Agriculture.

DEAR SIR.—

Yours of the 8th, accompanied by letter and specimen from Mr. Ditson, is received.

The large and formidable insect, said to be killing bees, is the Wheel Bug, (*prionidas cristatus*) so called from the semi-circular, cog wheel-like excrescence on the top of the thorax.

It is a distinctively southern species, and though quite common in the southeastern states, is, as yet somewhat rare in Missouri. This bug (for it is a true bug) is fiercely predacious and cannibalistic, and it is therefore probable that under certain circumstances it would attack even the honey bee. The case reported by Mr. Ditson is, I believe, the first observation of the kind, as the wheel bug has always been regarded as a valuable species from the

fact that it destroyed so many of our leaf feeding pests.

It does not eat its victims, but impales them on its stout beak, and unless they are very large and heavy, holds them up in the air and slowly sucks out the vital fluids. It should be handled with some care as a thrust of its beak inflicts a painful wound.

Yours truly,

MARY E. MURTFELDT.

Linwood Letter.

THE SEASON AND ITS LESSONS.

A. BOOMER.

The spring opened very promisingly for both bee-keepers and farmers. But a cold spell of some three weeks duration in the latter part of May and early part of June disturbed our calculations very much. When the weather cleared when we could examine our bees, many of them including some very strong colonies were found in a starving condition and had to be fed. The latter part of June being fine, swarming became profuse but no extracting until the 30th of June, and very little then. On the second of July a heavy rain fell which was followed by a week of such cold weather that little or no honey was gathered, this was the best week of the clover bloom but could not be utilized. On the 11th of July, the bees left the clover and went to the basswood and gathered freely from this source until the 20th, since which owing to the severe drought so very generally prevailing, there has been no honey brought in and we do not now expect any more this season.

My returns are about 65lb per colony, and an increase of 60%, this falls fully 35% below last year, and is somewhat discouraging.

LESSON LEARNED.

Now as to its lessons. I have learned that the bees should have liberal stores in the spring otherwise brooding will be slow and the bees will not come into condition in time to harvest the crop, feeding therefore should be resorted to, and every colony that has not an ample supply should be liberally fed and thus forced into condition in time for the harvest. A dollar spent in this way I feel sure would bring a return of 100 or perhaps 200 per cent profit.

"Contracting the brood Nest." I had read more or less of the advantages of contracting the brood nest for comb honey. But had not tried it until this season. I use the Richardson hive, and contracted it to 6 frames, put on a queen excluder and a case of sections, and ran in a swarm. Next day they decamped without having done a particle of work in the hive. We overtook them in a neighbors field, I by a liberal use of water brought them down. Hived them in a hive with free frames and they went to work like Trojans.

A few days after I ran another good swarm into the contracted hive, they accepted the situation and went to work. But in 15 days and before they had filled the case of sections, they swarmed out, leaving scarcely enough bees to care for the brood. On opening up the hive I found first, nearly all the comb made in the brood nest from starters, built for drones,—the Queen was only one year old; secondly, I found no less than 36 Queen cells on the way to completion. Some of them capped over, and only a small amount of worker brood. I cut all these out, took out the dummies and ran in a small swarm that was just then conveniently at my disposal first removing the drone comb and filling up with other good worker comb, and now I have a strong colony there. one or two other experiments on the same hive resulted a little better but altogether I do not see any particular

advantage in it, and will not resort to it again.

"FULL SHEETS OF FOUNDATION FOR SECTIONS AND NO QUEEN EXCLUDERS."

I have tested this with much more satisfactory results. Last session I tried producing sections without excluders, but did not use full sheets of foundation, the result being that in most cases the bees built out the balance with drone comb and the Queen filled it with brood. I find this season in every case where full sheets of foundation was used and all worker brood comb made the queen did not come up to lay and I had five sections without the use of excluders. I managed a single colony for a neighbor in this way and they made four full cases of 27 sections each of 4 $\frac{1}{2}$ x4 $\frac{1}{2}$ sections each case netting about 30 lbs or a total of 120 lbs of comb honey, and were at the last crowded for room. I am now quite satisfied that if full sheets of foundation are used in the sections we can save the bees the annoyance of crawling through excluders to prevent swarming. In the first week of warm weather after the rains were over. I took out all frames in the brood nest that had no brood, spread the frames having brood in over to the sides and put in empty frames of worker brood alternately between the other combs, put on a Queen excluder and a surplus case filled with combs, and in nearly every case there were no swarms. On some colonies I tried putting supers early, and when they got fairly to work in this I raised them up and put still another under, but when they had the upper super filled they swarmed out. So that I am now more in favor of removing all the honey from the brood nest and giving the Queen plenty of room.

As this communication is now much too lengthy. I will reserve what I have to say of my experience with "Harmony Hives" and a few other things for another issue.

Bees As Carriers.

A FRENCHMAN THINKS THEY MIGHT TAKE THE PLACE OF PIGEONS.

In France the suggestion has been made that bees might be used as messengers in war; not as substitutes for the carrier pigeons, but only when pigeons are not to be had or cannot be used. The diminutive size of the bee is its recommendation. At first sight the project seems unrealizable, because the bees cannot be handled as readily as the pigeons, because they are so affected by the velocity of the wind and other disturbing influences.

M. Tagnac, a well-known apiculturist has conducted experiments on this line with such results that the subject, to say the least, is worth considering. It has shown that bees find their way back to their hives from distances of about four miles, and that they fly with a velocity of about 13 miles an hour. On the strength of these facts, M. Tagnac began his experiments. He constructed a portable beehive and took it to a friend about four miles distant. After a few days, when the bees had become familiar with their new surroundings, some of them were removed to a peculiarly constructed receiver. From this receiver M. Tagnac let a few fly out in a room, and soon the bees settled on a plate of honey. While the bees were eating he fastened his dispatches on them.

They were fastened with fine lines, and great care was taken not to put any line on the bee's head or wings. When liberated in the open air, the bees immediately flew home. Arriving at the home hive, they found that they could not enter it, because the entrance had been made so small that the paper on their backs prevented them.

M. Tagnac has also made experiments in sending bees over longer distances, by establishing middle stations, but he is not very well satisfied with the results

as to time. Lately he has been experimenting with the *Bombus horrorum*, and well pleased with the results.—Foreign Letter.

Peter Piper's News Notes.

A snail's eyes are at the ends of its horns.

There are about 9000 cells on worker comb a foot square.

A frog never drinks water, but absorbs it through the pores of its skin.

5370 worker bees when not filled with honey weigh a pound, 2130 fill a pint measure.

In proportionate size a queen is $8\frac{1}{2}$, a drone 7; and a worker bee 6.

"Pulled queens" is a clumsy way of expressing the premature liberation of such, from their cells.

We miss the racy articles of John F. Gates in our Canadian bee Journal now. Can one or other of our enterprising editors not induce the witty independent John F. to stay with us? We like to read his outspoken articles. There is no honeyed sophistry in the writings of John F.

If the story going the rounds of the bee journals be true, that a petrefied tree dug up from a great depth somewhere in the United States, had stored in it pure well preserved honey; it effectually does away with the popular belief that the honey bee is not indigenous to this continent.

A competent authority on such matters, is displeased with the contents of the published report of the Ontario Bee-Keepers Association. In his comments thereon, he embraces the opportunity of patronizingly patting the Oxford Association on the shoulder. In all of which there is no ulterior motive at all. Oh no! But is it not a little inconsistent, for one of the "revising committee"

to grumble at the result of his own work?

A flea or a grasshopper can jump 50 times its own length. If man were endowed with the same jumping powers, he could clear a quarter of a mile at one bound. Uncle Amos on his bicycle would be no where in the race; if pitted against such a one.

A splendid honey flow from the basswood this year. Who says snowery weather is necessary, to a good honey crop? We have not had a shower since the first of May, and we have rarely had a better honey crop. It is true we need moisture to promote the growth of small plants, and to insure a profusion of bloom, and without blossoms there can be no honey: For this reason showers are useful. But the deeply embedded roots of the sturdy basswood takes up all the moisture necessary to nectar secretion, though the weather be exceptionally dry, no unripe honey this year, thanks to the dry weather.

The Economy of Bees in Nature.

Dr. J. M. Hicks discourses on the aid of bees in the fertilization of flowers in the following well-chosen language:

"How beautiful we see and realize the fact that bees are sure messengers in assisting horticulture and the horticulturist in reaping and gathering a bountiful harvest of fruits as well as many of the various grains and seeds of the land. Thus, when combined with the service performed by the bees in their eager pursuits, our admiration extends beyond them to their Great Originator, who, by such apparently small means, accomplished so simply yet so completely a most important object of creation. While the bees are receiving from the plants sustenance and at the same time giving them fertility, both to the hor-

ticulturist and to the florist is seen their valuable assistance in procuring remunerative returns. Thus it is true that if it were not for the valuable aid that bees and other insects perform in fertilizing many of the blooms of fruit trees and garden plants, we should soon be found wanting in a proper supply of fruit and seeds in carrying on the laudable business of horticulture, as well as fail in having seeds of a good quality at planting time. Thus we see that the two are directly and intimately connected with and depend largely upon each other."

Wintering.

A. E. HOSHAL.

At this time or later each year I am deluged privately with various questions concerning how best to prepare bees for wintering. On account of this I have thought it would not be out of place to answer some of them in the P. B. K.

There is always more or less of an anxiety in the minds of even intelligent bee-keepers during the winter, as to the condition the following spring will find their bees in. Not infrequently it happens, that he who keeps his bees according to the traditions of his fathers in box hives with little or no attention, winters them with tolerable success, to the chagrin and wonder of his less fortunate brother of modern hives and methods. We have on record all kinds of seemingly contradictory evidence concerning this wintering problem, and from this fact has arisen all kinds of theories concerning the cause of winter losses. Some claim it is moisture, because they cannot winter successfully where it exists; while others have wintered their bees in damp cellars, or have had the inside of their hives dripping wet from condensation, and combs covered with mold. Similarly some claim it is from want of proper ventila-

tion, but others successfully winter under a snow bank or in the foulest of cellars. Again others think it is the cold; while many whom they call "old foggy", bring their bees successfully through in any kind of an old box hive without protection. Be this and more all as it may, we must admit however, that it is no disadvantage in wintering successfully, that our hives are dry, clean and free from mold, that our bees are disturbed as little as possible, that the air about them is sweet and pure, that they are well protected from the cold, etc. Now I do not say, that the lack of any or all of these conditions is the prime cause of winter losses, but I do believe, that we have sufficient evidence, to show that they not unfrequently act, as "the last straw which breaks the camels back."

Without pursuing this farther I shall outline the winter preparations which I recommend, and which I believe, are observed largely by the majority of bee-keepers, who winter the most successfully and under varied circumstances.

(1) Arrange the colonies so that they will all be of average normal strength, each having a good queen.

(2) Contract the hive so that the bees will be able to cover all the combs, which will be equal to about five or six langstroth frames. A space of $\frac{1}{4}$ or $\frac{3}{8}$ inch should also be left above the top of the frames.

(3) See that each colony has not less than twenty five pounds of good honey, or what is preferable sugar syrup. If they do not, they must be fed until they do. This feeding should be done from the twentieth to the thirtieth of September. The feed should be given milk warm at about sundown, and as much of it as the bees will store during the night, which will be about fifteen pounds, and must not occupy more than two successive nights. If the amount fed is not more than fifteen pounds, it is best to be given all at once.

(4) If wintered inside the repository should be perfectly dark, free from vermin and disturbance, dry, clean and held at an unvarying temperature of forty-two to forty-five degrees. The ventilation need be but little, yet sufficient to keep the air pure, and accomplished without draughts. The bees should be carried carefully in at the beginning of cold weather, and the entrance of their hive left wide open. When desirable hives can be filed one upon the another several high, the first being raised a few inches from the floor.

(5) If bees are in single walled hives and are to be wintered outside, it will be necessary to protect them with packing, which should be adjusted immediately after feeding. Make a plain box so that when the hive is placed inside of it, there will be a two inch (which is better than more) space underneath, and at the sides and ends of the hive, and a three inch space over the top. Fill tightly all this space with dry packing such as sawdust, cut hay or chaff, arranging the entrance of the hive so that the bees will have a free passage way in and out and a place to alight when coming in. The cover of the box should be flat and pressed down on the packing. The whole box must be positively proof against snow and rain, so that the packing will not get wet, and some dark color outside to absorb heat from the sun, to which it should be exposed at all times, and if convenient sheltered from the wind.

(6) To prepare the syrup dissolve in a little warm water one-half teaspoonful of tartaric acid. To ten pounds of the best granulated sugar add four of water, bring to a boil and stir in the prepared acid. As soon as the sugar is all dissolved remove from the fire. The acid is unnecessary if three or four pounds of honey were stirred into the syrup while hot instead.

(7) To feed successfully a large feeder

is necessary. If this is not to be had, a bread or other shallow pail of sufficient capacity will do. Place an empty surplus case on the hive, into this and directly on top of the frames below place the pan. Pour into this the syrup over which sprinkle a handful or two of grass to prevent the bees from drowning. Cover all securely from outside bees, and close the hive entrance to about one or two inches.

If a little feed has been dropped over the sides of the pan and on top of the frames, it will attract the bees to that in the pan, and they will begin storing it at once.

Season in Florida.

J. B. CASE.

Though we do not have the wintering troubles to contend with that our northern brothers do, we find that to obtain the best results here, we have to keep up with the times, know what to do; when to do it; and how. Also that it pays to keep the best stock we can get, and to run our apiaries in a business way.

Last season was almost a total failure, as far as surplus was concerned, many apiaries barely getting honey enough for winter stores or rather enough to carry them through to the first honey flow, which is usually in March. As I make it a rule to always have my honey stocks running over with bees, I got an average of 50 lbs per colony.

This season has been a phenomenal one. The early bloom afforded honey enough to start brood rearing forming, and stocks that had proper care were strong in bees when the season opened, some two or three weeks earlier than usual. I allowed but ten increase from my honey stocks.

Queen rearing took up so much of my time, that I did not keep a record of

dates of extracting; and the amounts are approximate except the total, but as the mangrove honey was exactly known, it is very nearly correct.

My home yard is $2\frac{3}{4}$ miles from the river, the saw palmetto is much heavier near the river and does not usually bloom in any amount where I am, and as I am half a mile from the hammock (a dense mass of thick tall timber) which is $1\frac{1}{4}$ miles across, my bees do not gather much from the palmetto usually. The mangrove growing on islands in the river near the Ocean Inlets, extends up the river to about four miles of my home yards, all the apiaries mentioned one I believe, situated with mangrove on one side and palmetto on the other.

May 15 and 16th I extracted for the first time, again about 26th, and again about 4th of June; but about 10th yield began to close up, and on the 17th I moved $\frac{3}{4}$ of my colonies to the mangrove, having taken an average of 200 lbs. per colony from my 50 colonies. The bees left at home from various sources principally cabbage palmetto (a kind of palm) gathered an average of 225 from the mangrove, a total average of 425 lbs for these moved, and about 300 lbs for these left at home, a grand total of 1900 lbs extracted honey from 50 colonies and 10 increase, and 400 to 500 combs built out from $\frac{1}{2}$ inch starter. Possibly the bees at the mangrove have gathered some since Aug. 3, as I have not seen them. Part of the time during the palmetto flow (saw) it was raining; during the mangrove flow it rained nearly every day, light showers in the afternoon. I append the yields of a few bee-keepers they are within 20 miles or so. Some of the Post Offices, I am not sure of, also some of the initials, but I got the names and amounts from a reliable source.

H. H. Robinson, Pt. Orange 65 colonies
[12,600] lbs.

P. W. Johnson, Pt. Orange 75 colonies
(estimate 10 to 11 tons.

Mr. Jones, Pounce Park 46 colonies 11,-
(600] lbs.

W. S. Hart, Hawk's Park	116 colonies	(40,000lbs.
H. W. Mitchell, Hawk's Park	56 colonies	(21,280lbs.
Mr. Olsen, Middle Florida	38 colonies	(12,150lbs.
Mr. Marsh, Middle Florida	100 colonies	(30,500lbs.
Mr. Storer, Middle Florida	275 colonies	(2000 combs) 42,000lbs.
A. F. Brown, Middle Florida	208 colonies	(4½ tons comb) 42,000lbs.

This is far ahead of any previous yield of honey in this part of the state, that is on record. In 184 or 85, W. S. Hart averaged 250 lbs per colony. I believe that is the next largest yield to this year.

I confess that I have been for three years trying to run my apiary for all it is worth, and to get every pound of honey possible, and I find that stock improvements, hard study and proper care tells and there is big pay in it too.

Saw palmetto honey is very thick nearly a straw color-agreeable flavor

Mangrove is nearly as color and white as water, rather thin, mild flavor, both are fine looking.

J. B. Case, Ft. Orange, Fla.,
Sept. 1, 1894.

The Honey Industry.

The TIMES (Aug. 14), under the heading of "The Honey Industry," remarked "that few rural industries offer greater opportunities for profitable extension than that of bee-keeping," and "that the production of honey in this country might be enormously increased."

Singularly enough, on the same day at Hawarden, Mr. Gladstone expatiated on the advantage of developing every branch of smaller cultivation, inasmuch as "whatever is produced from the earth in excess of what we have previously had confers a double benefit." Mr.

Gladstone specially mentioned the "care of bees," and remarked that. "although the transaction in a small garden may appear unimportant, as it cannot be on a very large scale, nevertheless, when the aggregate of transactions came to be made up, it is a vast aggregate, and commerce derived important extension from the development."

It is encouraging to the British Bee-keeping Association and to its affiliated county societies to have this publicly advocated. It is encouraging to know, too, that despite the unfavorable character of the present season, the bee keeping industry is, without doubt, steadily extending.—British Bee Journal.

Rhubarb and Honey.

Another most excellent vegetable that should be grown in your garden—since it can be had so easily—is rhubarb, or "pie-plant" I do not recall another vegetable that is so useful, and so pleasant in a hundred instances. Nothing can be more healthy or enjoyable than pie-plant stewed with honey. The children love it, liberally spread on their big slices of bread! Incidentally, you save your butter. It not only tastes good, and nourishes well, but it is excellent to keep the stomach and bowels in natural condition. Jelly made of it rivals that made from currants or crab. By all means, can lots of it for winter's supply. Set out big roots this fall for next year's use.

Indeed, I look upon "pie-plant" as the poor man's orchard. It possesses all the good qualities of the fruits, beside some special merits of its own. When I visit farmers—I may come to take tea with you some day—and do not find plenty of this excellent vegetable in the garden, I know there is something wrong with their judgment.—Dr. T. F. Peiro in American Bee Journal.

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barrel . . . \$1.25

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1 Dove-Tailed Hive, complete in
every particular . . . \$1.50.

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