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Los Angeles, California: B.S.K. Bennett and E.S. Eaton, September 1, 1897

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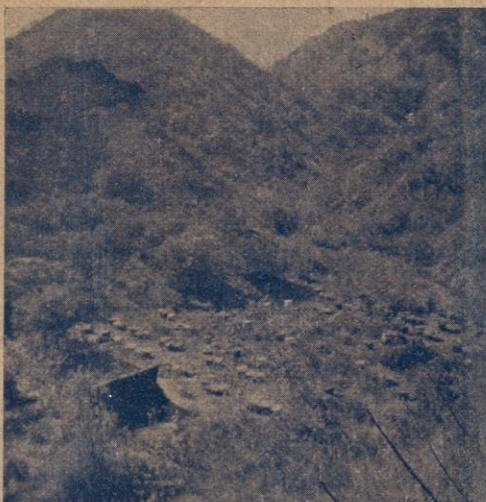
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# The Pacific.. Bee Journal.



Monthly Illustrated, Devoted to the Profitable Improvement in Apiculture, Especially on the Pacific Slope. Price 5 Cents, 50 Cents per Year.

LOS ANGELES, CAL.: U. S. A.



APIARY OF JOHN A. PEASE, MONROVIA, CAL.

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# The Pacific Bee Journal.



Devoted to the Profitable improvement in Apiculture, especially on the Pacific slope.

PUBLISHED MONTHLY BY

B. S. K. BENNETT AND E. S. EATON,  
365 East Second Street,  
LOS ANGELES, - - CALIFORNIA.

B. S. K. BENNETT,  
Editor and Business Manager.  
E. S. EATON,  
Associate Editor.

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See advertisement in January B. P. J.

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*You get the Queen Bee,  
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WE are done with Hybrids and Blacks, that starve to death, while Italians are gathering more than they consume. Our large mountain apiaries are sadly decreased in number, for the want of Italian queens. The calls for queens were so numerous last year, we had no queens to spare for our own apiaries. In fact, we did not think it worth while to re-queen on a dry year, such as '96 was. Hence, a loss for the Italians we did have made surplus honey, while other bees were being fed.

There is a moral in this for, in a good year, such as '97 promises to be, with its fifteen inches of rain, it is an assured fact that Italians will gather twice as much as other bees will; and all this from a change of queens, which can be made at so nominal a cost. Surely a good business investment.

For rearing queens, we are using the Alley plan, having cells built out on the populous colonies. We destroy all smooth, deformed and small cells and queens, as we are working for a reputation.

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365 East Second Street,

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## Honey Market Reports.

**NEW YORK—Honey**—Demand for comb fallen off a little. Fancy white in demand; beeswax advancing; supply light. Fancy white comb, 10; No. 1 white, 9, fancy amber, etc.; No. 1 amber, 7; fancy, dark, 7; white extracted, 5½; amber, 4½; dark, 3½@3¾. Beeswax, 26@27.

**MILWAUKEE—Honey**—Fancy white, 12@14; No. 1 white, 11@12; fancy amber, 9@10; white extracted, 5½@5; amber, 5@5½; dark, 4. Beeswax, 26 and 27. Demand on honey fallen off a little; our supply of choice qualities not large. Better qualities wanted.

**DENVER—Honey**—Fancy white, 11; No. 1 white, 10; fancy amber, 9; white extracted, 6; amber, 5. Beeswax, 25. We are having a good demand for our brand of extracted honey.

**BOSTON—Honey**—Fancy white, 13; No. 1, 11 and 12; white extracted, 7 and 8; amber, 5 and 6. Beeswax, 25 and 26. Lighter demand owing to warm weather.

**DETROIT—Honey**—Fancy white, 10 and 12; No. 1 white, 10 and 11; fancy amber, 8 and 9; No. 1 amber, 7 and 8; white extracted, 5 and 6; amber, 4 and 5. Beeswax, 25.

**SAN FRANCISCO—Honey**—Fancy white, 10; No. 1 white, 9; fancy amber, 7; No. 1 amber, 9; fancy dark, 5; No. 1 dark, 4@5; extracted white, 5; amber, 4; dark, 2½@3. Beeswax, 24@25. Demand not active for honey or wax. New honey of fine quality.

**LOS ANGELES.** — *Honey.* — Fancy white, 9@10; No. 1 white 8@9; fancy amber, 6; fancy dark, 5@6; No. 1 dark, 4@5. Extracted white, 4@5; amber, 4; dark, 3. Beeswax, 21@23. No honey demand. None selling. Prices slight upward tendency. Not a big crop.

**CINCINNATI—Honey.**—No. 1 white, 12@13. No. 1 amber, 11@12; No. 1 dark, 10. Extracted amber, 5@6. Beeswax, 22@25. Demand fair for beeswax.

**KANSAS CITY—Honey.**—No. 1 white, 13@14; No. 1 amber, 12; No. 1 dark, 10. Extracted white, 6; amber, 5@5½; dark, 4@4½. Beeswax, 25.

**CLEVELAND—Honey**—Fancy white, 12@12½; No. 1 white, 11@12; No. 1 amber, 9@10. Extracted white, 6@7; amber, 4@5. Beeswax, 22@25. Beeswax scarce, and would sell readily at quotations.

**CHICAGO.**—*Honey.*—Fancy white, 13; No. 1 white, 11; fancy amber, 8@9; No. 1 amber, 7@8; fancy dark, 8@10; No. 1 dark, 7@8. Extracted white, 5@7; amber, 4½@5; dark, 4@5. Beeswax, 25@27. Stocks light. Market bare of comb honey. Choice comb, with sell at top prices.

**PHILADELPHIA.** — *Honey.* — Fancy white, 10; No. 1 white, 7; No. 1 dark, 5@6. Extracted white, 5@6; amber, 4@5; dark, 3½@4. Beeswax, 25. Market dull on honey; beeswax always in demand.

**ST. LOUIS.**—*Honey.*—Fancy white, 12@13; No. 1 white, 11@12; fancy amber, 9@10; No. 1 amber, 8@9; fancy dark, 7½@8; No. 1 dark, 6@7½. Extracted white, in cans, 5½@7; amber, in barrels, 3@3½. Beeswax, 23@23½. Extracted honey especially slow; as a rule it goes to bakers and manufacturers. Choice white comb honey in good demand. Extracted goes well in October.

**MINNEAPOLIS.**—*Honey.*—Fancy white, 12@13; No. 1 white, 10@11; fancy amber, 10@11; No. 1 amber, 8@10; fancy dark, 6@7; No. 1 dark, 5@6. Extracted white, 6@7; amber, 5@5½; dark, 4½@5. Beeswax, 22@25. Comb honey cleaned up. A good outlet for good grading and crating in comb honey. The common qualities of comb we find difficulty to dispose of. Extracted steady. New water white goes at full quotations.

## HONEY BUYERS.

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## The Beekeepers' Review

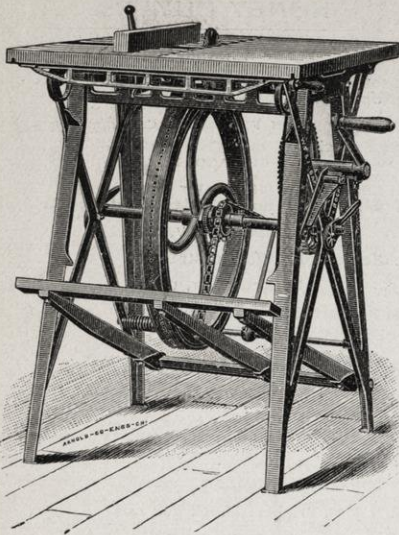
Has several points of superiority. 1st. It gives the reports of the Michigan Experiment Apiary—gives them each month, as soon as possible after the work is done, while they are fresh and of newsy character, and can be of some benefit. 2d. It gives Hasty's monthly three-page review of the other bee journals. 3d. F. L. Thompson, a practical bee keeper and thorough linguist, reads twelve of the leading foreign bee journals, and each month, furnishes the gist of what he finds in them that is valuable. There are other points of excellence possessed by the *Review*, but these three are to be found in no other journal. The *Review* is \$1.00 a year. Ask for a sample, or send 10 cents for three late but different issues.

W. Z. HUTCHINSON,  
Flint, Michigan.

## Convention Notice.

*Secretaries please keep us posted as regards to future meetings in the States.*

THE Central California beekeepers' Association will hold a meeting at Traver, the first Wednesday in September. Invitations are extended to the Brother Beekeepers to come. Bring your wife and daughters.



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 500 " ..... 52 00  
 1000 " ..... 100 00  
 Hand holes 1/4 cent per case extra.



The Bennett Bee Hive Co.,

Los Angeles, Cal.



# THE PACIFIC BEE JOURNAL.

DEVOTED TO THE PROFITABLE IMPROVEMENT OF APICULTURE ON THE PACIFIC COAST.

Published by B. S. K. Bennett, 365 E. Second St., Los Angeles Calif.

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VOL. 2.

SEPTEMBER, 1897.

No. 9.

## BEE HUNTING IN AUSTRALIA.

The swarm of bees which made its appearance on Exchange street in the early part of last week was of great interest to an elderly gentleman who for some years lived in Australia, the land of kangaroos and red-headed pugilists, and as he watched the operation of hiving the honey gatherers he grew reminiscent and said:

"That recalls one of the most interesting experiences of my residence in Australia, where I spent about two weeks out on a large sheep range owned by a friend of mine, where I made the acquaintance of one of the herders, who was a native black and a great hand to trail bees to their homes.

"One day I asked permission to accompany him on one of his trips, and after a little deliberation he consented. Before setting out he provided himself with a small bunch of cotton, a little gum of some sort, and a bottle of water. The care he took in preparing these articles aroused my curiosity, and when I questioned him he said they were to be used in the hunt for honey. I failed to see how they could be of service, but made up my mind to watch closely and see what he would do.

"For some time we rode on in silence, he all the time keeping a sharp lookout for something which I had not the slightest idea of, and when he suddenly reined in his horse and started for a clump of flowering bushes I followed his example, and was somewhat astonished when he lifted a warning finger and pointed to a bee which was busy gathering honey.

"Motioning me to keep quiet, he drew out the water bottle, filled his mouth, and then took a small tuft of the cotton, applied a bit of the gum to it and stepped toward the bee. When he was close enough he squirted the water on the bee, and while it was trying to shake off the water he deftly fastened the cotton to its back and remounted his horse.

"When the bee recovered the use of its wings it started off across the country, and we following it. It was impossible for me to keep track of the bee, but my companion never lost sight of it and followed it unerringly as it flew along, unconsciously leading an enemy to its store-house. We followed it for several miles until we reached a large gum tree. An inspection showed that we had made no mistake, and prep-

arations were made for smoking out the bees.

"He cut a hole in the lower part of the tree and kindled a fire, across which he laid a number of fresh branches to create a smudge. To insure the smoke doing its work properly, a sort of screen was made to force the smoke into the hole, and in about half an hour the bees had become helpless and we obtained about thirty pounds of honey.

"We were just getting ready to return home when a peculiar looking little bird, somewhat larger than a sparrow, began to flutter around our heads and twitter. My companion gave a cry of satisfaction and then started off pell mell after the bird. I was at a loss to explain his action, but thought best to follow him.

"When I had caught up with him he explained that the bird was a honeybird and wanted to show him where there was a honey tree. Having never heard of such a thing I thought that he was making game of me, but his earnestness partly convinced me and I decided to keep on.

"After a chase of several miles the bird began to hover around a tree, and as we drew nearer we saw bees issuing from a hole in the trunk. The former methods for securing the honey were put into operation, the bird sitting on a nearby limb while the operation was going on. After securing the honey, a portion was set aside for the bird, as my companion declared that unless he did so the bird would refuse to guide him any more.

"We found several other trees and marked them and reached the house in the evening. After supper my host entertained me with an account of the amount of honey which the herder had gathered, stating that in one week the previous summer he had secured nearly a thousand pounds.

"Since leaving that place I have visited a number of large apiaries in various countries, and seen any number of devices for keeping bees, but I never met any one who made such an impression upon me as that bee hunter with whom I spent a day in Southern Australia."—Rochester Union and Advertiser.

Josiah Gregg, the apiarist, has sold out his bee business to J. F. Boldon of Tulare. Mr. Gregg had one of the best paying bee farms for its size in the county.

**SALT LAKE LETTER.**

SALT LAKE CITY, July, 1897.

Friend Bennett—The jubilee is over now. Salt Lake last week was one grand blaze of glory. The great panorama of the past fifty years was spread out before the many thousands of admiring people from this and adjoining States. Truly the dream of the pioneer has been fully realized. The march of progress from the hand-cart and the ox train down to the present time was all fully portrayed. But the feeling of reverence at the sight of those old pioneers of fifty years ago, marching in the procession, is more than we can portray. Their grand reception and the homage paid them stirred up the blood in their veins until many of them felt almost as young as they did in the long ago. One of the unique features of the jubilee (you may possibly know the bee-hive is the emblem of the State) was a huge bee-hive about ten feet in diameter, with giant bees. The gulls, which are held sacred by the people of Utah, because they saved them from starvation by devouring and destroying the crickets and locusts, were displayed in all their glory. But one of the grandest sights of all was 10,000 Sunday-school children in procession, with scores of appropriate mottoes and floats. Some of the things noticeable by nearly all strangers was the good naturedness of the crowds and the veneration and respect for the aged. Often the people would be packed together like sardines for blocks; old and young, baby carriages and all. They good-naturedly jostled together, vieing with each other to assist and accommodate, and all seemed willing to spend their time or go out of their way to aid a stranger, or to help those in distress. Taken altogether, the whole people had a grand and glorious time, which they will think of with pleasure during the rest of their natural lives. Many visitors expressed themselves that this social kindness was one of the grandest features of the whole jubilee.

While as a whole the bee industry in Utah is in a flourishing condition, still we have had some peculiar features the present season. Last year we had in some parts of the State a disease known as pickle brood, but we are at a loss to know why it is called pickle brood. Like foul brood, it is a disease of the brood and not of the living bees. All larvæ affected with the disease are what is known as wrong, or backward presentation. All larvæ affected die, as it is impossible for them to get out of the cell in that condition. They rot and finally dry up, and when about the size of the common house fly the bees drag it out of the cell and hive. We would be pleased if some of our beekeeping friends would inform us if this is pickle brood. If so,

why should it be called such? In some places where the bees had this disease last year, it weakened them down so that some of them died through the winter. The greater portion of our bees have had this disease this year, but as a rule they are now mostly over it. In some places they are booming. We have bees located in six different places. Those bees have averaged ranging from 50 to 150 pounds to date, and I have received letters from beekeepers stating that their average is over 200 pounds. But we are running for increase this year, which makes our average lower than it otherwise would be; still we are above some that have had little increase, while we have increased from one to three hundred per cent. In some places where our beekeepers have depended on natural swarming this season, they had little or no increase. For one, I would not be bothered with natural swarming. I have many times tested this swarming problem, and every time the non-swarmers have produced more than twice as much as the go-as-you-please swarmers. This belief in swarming because it is natural is all bosh. Following those ideas we might let them go altogether on the natural plan, and get little or nothing from them. This natural business never has been a success with us.

Many beekeepers that have depended on natural swarming have had little or no increase. The average from 1 to 20 per cent on some have not swarmed at all. No one can seem to account for the cause. Some think it may have been the everlasting long winter we had. Some have missed it on the dividing question, because they overdo it, or they do not know how. Those that use plenty of foundation and combs have made a success.

The Pacific Bee Journal is to us a welcome visitor and we wish it every possible success.

I may send you later a report of one or more of our best colonies.

Yours truly, E. L. LOVESY.

**APIARY INSPECTOR APPOINTED.**

Last Tuesday the board of supervisors of Fresno county, acting on two petitions from beekeepers and prominent taxpayers of that county, decided to appoint an inspector of apiaries. Two men were recommended for the position—R. M. Thompson of Fresno and James A. Roberts of Clifton. Mr. Roberts was appointed for the month of August, at a salary of \$50 for that month, and is to report the results of his work for that month at the September meeting, when the board will decide on the question of continuing the office. It was proven by evidence submitted to the board that foul brood was prevalent in the apiaries of that county, and that the fou

broods were dangerous to the production of bees, as the bees die in the larva state; also, that the bees were necessary to the growth of certain kinds of fruit, as they fertilize the blossoms. Mr. Roberts is well qualified for the position to which he was appointed and has the confidence of the beekeepers. He was appointed to a like position in Nebraska by the Governor several years ago. W. A. H. Gilstrap, secretary of the Central California Bee Keepers' Association, was present at the meeting.

The remedy prescribed by the law of this State for foul brood is that the infected hives with all their contents shall be buried in the ground or burned, the night after the owner of the hives is notified of the disease being in his apiary.—Hanford Journal.

**FRESNO LETTER.**

FRESNO, Aug. 13, 1897.

Friend Bennett—The copies of the P. B. J. received just on the eve of our departure for Fresno Hot Springs, so didn't get to look round for subscribers until this week.

Mr. Roberts, Bee Inspector for this country, called this week. In conversation with him I found he wasn't taking the P. B. J. The first thing I did was to tell him what a good paper it was; and gave him a copy. He looked it through, and came and handed me the 25 cents for one year's subscription, showing he also thought the same as I did.

Our bees are bringing in lots of honey now, but until the present time they haven't done very much. During June the weather was so cold they got a very late start, but now we expect a good flow for six weeks; and if they do as well as we expect we will get about half a crop.

No swarming this season. We only had an increase of five from 100 colonies. It doesn't discourage us when they don't swarm, but very discouraging when no honey flow. All the bees in this vicinity so far as I can hear are storing lots of surplus.

The bee inspector found considerable foul brood in this section. This is the first inspector we have had. We feel glad Fresno county has at last advanced in apiculture to have one appointed. He is educating the people so they will know in the future what foul brood is. He spent about three hours in our apiary; found some foul brood; we know it now ourselves. I am confident if he comes around one year from now he won't find any in our apiary.

We are real pleased with the P. B. J.; think it is just the paper for California. I will do all I can toward getting subscribers. Enclosed find 50 cents. Send P. B. J. to the following subscribers: J. A. Roberts, Bee Inspeotr, Sanger, Fresno county,

Cal.; W. W. Westcot, Easton, Fresno county, Cal., and oblige,  
M. E. RAINS.

**THE HONEY INDUSTRY.**

The American people are proverbially partial to sweet things, and anyone who doubts the truth of the tradition should consult the statistics of the consumption of honey in the United States. Last year there was produced in this country fifty million pounds of honey, and most of it was consumed by our own people.

	Tons. Per ton.	
Extracted honey.....	3,000	\$ 80 \$240,000
Comb honey.....	1,000	160 160,000
Beeswax.....	21	400 8,400
Total.....	4,021	\$408,400

This State can boast of having nearly 5,000 beekeepers within its borders. A large proportion of these men are located in Southern California. These beekeepers own on an average one hundred and fifty colonies apiece.

In Arizona there are estimated to be three hundred people engaged in the bee industry, having about 40,000 colonies.

The shipments of honey from different points in California in 1896 amounted to thirty-eight carloads, or 758,000 pounds.

The bee business is evidently destined to expand into one of the greatest of our California industries and is already rivaling the production of fruit as a source of profit.

The amount of capital invested in the bee business of California, exclusive of land, is \$450,000. The people engaged in the business spend annually something like \$75,000 for supplies and about \$70,000 for labor.

In 1886 Southern California sold 5,000 tons of extracted honey and a proportionate amount of comb.

Southern California, with her wealth of flowers and other natural advantages, should be the greatest honey producing section in the world. With proper legislation to protect the consumer against adulterated honey, a demand for the genuine article would be created that would more than equal the supply.

Los Angeles Daily Journal.

The Native Lumber Co. has sold 3000 cases and Ed Bradley 1000 to the honey men of the valley. This means twenty-five carloads of the sweet stuff. In pounds it will be about 500,000, and at three cents per pound the amount runs up to \$15,000, and this amount will be almost entirely spent in this valley. Several outside firms have also sold cases to our honey men, so that we can certainly count on thirty carloads of honey that will be shipped from this valley this year.—San Jacinto Register.



### APIARY.

Gleanings in Bee Culture discusses rules for the grading of honey. A Mr. Thompson suggests the following:

Fancy—All sections to be well filled, combs straight, and firmly attached to all four sides, the comb unsoiled by travel-stain or otherwise; all the cells sealed except the row of cells next the wood. The wood, if stained, to be thoroughly cleaned in every grade.

No. 1—All sections well filled, but combs uneven or crooked, detached at the bottom, or with but few cells unsealed; comb may be soiled a little by travel-stain, propolis or otherwise.

Dr. C. C. Miller comments as follows:

After carefully comparing the following gradings, putting much faith in Walker's gradings as an honest man of intelligence and much experience, and after considerable discussion with Emma, who doesn't entirely agree with me, here's what comes:

Fancy—All sections to be well filled, combs straight, firmly attached to three sides, the comb unsoiled by travel-stain or otherwise; all the cells next the wood, the outside surface of wood scraped of propolis.

No. 1—All sections well filled, but combs uneven or crooked, one-eighth part of the comb surface soiled or unsealed, or the entire surface slightly soiled. Outside surface of wood well scraped of propolis.

Mr. Thompson leaves out of fancy "of even thickness," and Mr. Walker says, "of comparatively even thickness." I leave it out entirely. If you have "combs straight" there won't be much trouble about "even thickness," and "comparatively" is indefinite at best.

Both men omit "both wood and," which I think is right; but by putting nothing in its place they jump to the other extreme, and you will see that allows a man to put in fancy honey all his sections without a knife ever touching one to scrape the propolis. So I add "outside surface of wood well scraped of propolis." Walker comes at it indirectly by saying "reasonably neat in both grades."

In No. 1 I omit "detached at bottom," as that is not necessary, being already allowed in fancy by saying, "attached to three sides." I think it might be better to word No. 1 thus:

No. 1—The same as fancy, only the combs may be uneven or crooked, one-eighth part of comb surface slightly soiled.

The other way leaves it that the comb need be attached only at the top, which would hardly do for shipping. Please understand that this last No. 1 stops at the paragraph quoted.

I've tried without prejudice to say what change would allow such men as Walker and Muth to use the grading; but no

amount of tinkering will make it right to call the bulk of the crop fancy and the rest No. 1. It is not honest, and that is all there is about it.

Emma objects, and with no little reason, "to combs unsoiled by travel-stain or otherwise." If it were really fancy it would be all right. But as fancy is really the bulk of the crop, and No. 1 the seconds, it will be impossible to get more than half the sections to come up to the requirements in that particular. It is not the general thing to take off a super of sections in which every section is snow-white. Some of the comb surfaces are slightly discolored before three-fourths of the sections are sealed. A very slight discolorization does not and ought not to rule them out. But perhaps that can stand, as in practice it cannot be strictly adhered to.

I don't like any of it, but I think I have tried to follow out the spirit of what you want.—N. W. Horticulturist.

### WILLIS LYNCH SPENDS MANY DAYS WITH HIS HONEY GATHERERS.

Willis Lynch has returned from his bee ranch near Bellota, where he has been putting in some vacation days visiting the honey gatherers. Mr. Lynch has one of the best apiaries in the county and takes much pride in it.

"Bees are not doing very well this year," said the well-known school teacher to a Record reporter. "The early rains knocked out the flowers. My swarms are doing nicely, considering, but in other places I hear that they are starving and leaving their hives.

"What is the kind of food your bees get?" was asked of Mr. Lynch.

"Well, mostly alfalfa blossoms mixed with golden rod. The nectar of the alfalfa bloom makes a beautiful clear honey, with a blue cast, but the golden rod serves to change it to a very beautiful amber. I have one hundred or more hives of bees, but I don't believe I will get any honey from them this year. They will need it all to live on.

"Eight years ago," said Mr. Lynch, "I started with one swarm of bees. Many people suppose that only one swarm a year can be raised. While that is true, each swarm can be divided into three or four and each given a queen."

"But how do you get enough queens?"

"Raise them. I can raise as many queens as I want to by having the brood fed properly. There are usually several queens born in swarms, sometimes seven or eight. The first ones out have an advantage, as they penetrate the cells where the others as yet unborn are enveloped and bite their heads off. If three or four

queens come out at the same time they fight to the death, and it is the case of the strongest one surviving. I imported some Italian queens recently and they have been doing excellently."

Mr. Lynch is entirely at home among his bees and seems to walk among them with perfect impunity, while others tremble at sight of one of the little honey gatherers. In fact Mr. Lynch has one pet hive with which he can do almost anything without being stung. Others, however, are surly and cross and do not hesitate to plant their stinger in anyone who goes near them.—Stockton Record.

#### ITEMS FROM GLEANINGS.

I have failed so far to get drawn combs completed as soon as these starters of foundations.

Alfred Austin, England's poet laureate, is a member of the Kent Beekeepers' Association—not an honorary member, but pays his subscription.

Ants in Hives.—A French apiarist says he is successful in getting rid of ants by first removing what he can of their nests, then sprinkling well with finely crushed soot.

A beekeeper in Luce, Michigan, makes this almost incredible statement in the Review. He says: I want to tell you how quickly I had twenty-one sections ( $4\frac{1}{4} \times 4\frac{1}{4}$ ) filled and sealed over. I used starters of foundation 4 1-8 inches long by  $1\frac{1}{2}$  inches wide. I used the Heddon old style supers and they hold twenty-eight sections. I put this super of sections on the hive on the 3d day of July, and took it off on the 6th with the sections all completed except the front row of seven sections, which was almost ready to seal over. The hive that I put this super on had two on it already; one was about seven-eighths full and the other about half full. Instead of raising both supers, as I usually do, I only raised the top one and put the empty one in between the upper and lower supers. The only reason I can give for the front row of sections not being completed as soon as the rest is that I raise the front of all my hives about one inch high from the bottom board.

L. A. Aspinwall, in Beekeepers' Review for August, says: The revolution caused by the invention of moveable frames and comb foundations has enabled the specialist to produce a much finer product of comb honey at greatly reduced cost. We look at the quotations to-day and compare with the prices of thirty or forty years ago, feeling as though the bottom had dropped out of beekeeping. But when the Quinby system was in vogue and honey commanding 25 cents per pound, how

much were we able to secure per colony as compared with to-day?

If an average of twenty-five pounds per colony was obtained it was considered a good one. To-day we are far in advance of that, with a price commensurate with the outlay. The advent of moveable frames and comb foundation were at the time of high prices, and those who first occupied the field enjoyed the golden age of beekeeping.

To-day we are upon a better basis as regards profits than when honey commanded 25 cents per pound. We can produce at least three times the quantity and with factory-made supplies at a cost not exceeding the percentage of former years. I am speaking in reference to honey production. True, the value of the colonies was greater than to-day.

#### TO YOUNG BEEKEEPERS.

When you are in doubt about what to do when something transpires out of the usual way in your apiary, write us for information. We don't pretend to know everything about bees and their management, but we have greater resources for obtaining the results of beekeepers' experiments than private individuals are supposed to have. We are surrounded with volumes of bee lore, and it will be a strange thing if we cannot find the medicine that will suit your case. We will at all times respond cheerfully to any inquiries you may make in our particular lines. A man should never hesitate to ask for information upon subjects that interest him and that he does not thoroughly understand.

It is said that the mints are much valued as honey plants. We don't pretend to know how much nectar they afford, but it has long been known that mint gives a fine bouquet to julyos.

From a recent article in the American Bee Journal of Chicago, with the above heading, from the pen of Dr. Gallup, one of our most prominent bee men, we condense a few important facts as the result of the Doctor's experience. He says: "In getting queens from many different breeders I have run across one case of bee paralysis. The queen came from Ohio. She looked well, and so did her workers. I raised five queens from her, and they all died soon after they commenced producing eggs. I had one in an observation hive and watched her closely until she finally swelled up and died with paralysis.

"I got rid of the disease by introducing healthy queens from healthy colonies."

The conclusions which the Doctor arrived at were that the disease is transmissible and that there is no remedy for it except to destroy the source of its propagation.

## THE PRESENT LOW PRICE OF HONEY.

There is no subject which, at the present time, seems to occupy the minds of the beekeepers of the country, and especially of Southern California, so much as the marketing of the crop. As the season for active work among the bees has nearly or quite closed, and the beekeeper has an opportunity to think of something besides the manipulation of the apiary, his mind naturally turns to the question of the disposal of his honey. The season, although not as good as we hoped for, has yet been fairly good, and the majority of beekeepers find themselves in possession of a crop of honey, (great or small, according to circumstances), of which their next thought naturally is how to dispose of to the best advantage.

But when the honey is offered for sale we find but little call for it, and the price offered for it is so low that it will scarcely cover the cost of production.

Now the question arises, Why is this so? As there can be no effect without a cause, we naturally enquire what is the cause of the present low prices of honey? This is a very proper question, for unless we can find the cause it will be very difficult if not impossible to find a remedy.

In looking over the August P. B. J. I find this question is discussed to a greater extent than any other, with as many different reasons given as there are different writers. But while they nearly all doubtless have an influence in bringing about the present state of affairs, yet it seems to me that the greatest factor in the case, in fact the one that has done and is doing more to bring down the price of honey than all others combined has been overlooked altogether. Before proceeding further, however, I wish to digress a little and examine some of the propositions that have been offered as the cause of the present trouble.

We will commence with:

**Adulteration.**—What effect has it on the honey market? There can be no question but it has had a very deleterious effect on the price of extracted honey, not only by flooding the market far beyond the demand, but also by creating an absolute distaste for honey in people who know nothing of the taste of pure honey. But it is generally admitted that the adulteration of comb honey never has been and never can be practiced with profit, and consequently can have but little effect on its price.

Another proposition is "hard times," and general stagnation in business. If this proposition had been offered a year ago there would have been some reason in it, for then all kinds of business were at a standstill, as is always the case just before

a presidential election, but more so last year than usual. Then uncertainty and distrust pervaded the whole country, and of course the price of all kinds of merchandise was affected thereby. But now all this is changed, and it is a fact patent to all but the wilfully blind that business is reviving all over the country, and prices are advancing on nearly every thing and especially on all farm products.

Secretary of Agriculture Wilson says that the advance of the prices of farm products in the last year will make a difference of \$500,000,000 in favor of the farmer of the United States. Wheat is selling now one hundred per cent higher than it did a year ago. With the increase in the prices of farm products, manufactories are starting up, and those already in operation are enlarging their capacity and increasing their force, giving employment to thousands of men who have been idle for months, at increased wages. I have just read the following item in the Signs of the Times of Oakland, Cal., and have also seen it in the Los Angeles Times and other papers:

"Leonard Godchair, the owner of seven sugar plantations in Louisiana, and said to be the largest sugar producer in the United States, has ordered an increase of sixteen and one-half per cent in the wages paid to his field laborers. The wages paid to laborers skilled in the manufacture of sugar will be increased from twenty to thirty per cent."

Yet with all these indications of returning prosperity the price of honey still goes down! down! down! Now why is it? It certainly is not hard times and stagnation of business that causes it, for if so, prices of honey would begin to rise with that of other products, as business increases and times improve; so we must look still farther.

There is one other proposition that has been advanced, (and I have kept it till the last, because it is in line with what I believe to be the true cause of the trouble), and that is overproduction.

It is an established principle in commerce, well understood by all business men, that the price of any article is governed by the law of supply and demand; that when the demand exceeds the supply the price goes up, and when the supply is in excess of the demand the price must go down; and it matters but little whether that excess exists, they will refrain from buying, hoping that prices will fall so they will be able to buy to better advantage later on. This, of course, checks the demand and prices must fall until they go so low as to create a new demand, and the low price having been established, will continue so long as the supply holds out.

Now let us make the application to the present question. For the last three or

four months all the bee papers in the country, at least all that I have seen, and I think I have seen the most of them, have been sounding the trumpet all over the land, telling what an enormous crop of honey was being produced this year until the people have come to believe that the land is literally flowing if not with milk and honey, at least with honey without the milk. In the August number of the P. B. J. I counted no less than twenty-one such items (ten on the first page), giving the people the impression that the supply was inexhaustible. Now what could the effect be but to demoralize the market and bring down prices. The bee papers are supposed to be published in the interest of beekeepers, but such articles certainly work directly against their interests, not only in the way that I have mentioned, but also in other ways.

It has a tendency to discourage the faint-hearted ones and cause them to sell at any price that is offered and even to offer it at a figure far below what any buyer would think to offer. A few days ago I heard of one man who has produced several tons of nice white comb honey, well finished off and unstained, that would pass in any market for No. 1, and much of it for fancy; who said that if any one would offer him 6 cents per pound for his crop, he would let it go; and he didn't know but he would take 5 cents for it.

Of course, if he sells at that price it will establish the price for others, for the dealers will use that as a weapon to fight higher prices with others. I don't think that the blame lies altogether on the editor's shoulders. The beekeepers themselves have much of the blame to bear, for when they raise a big crop they are very apt to publish it and let the world know how skillful they are; while the failures are very seldom mentioned; thus working against their own interest by creating the impression that the supply is much greater than it is, and so bringing down the price; for, as I said before, it makes but little difference whether there is an over-abundant supply or not, so long as people believe that there is.

Now having, as I believe, pointed out the true cause of our present trouble, the remedy is obvious. Let us quit publishing our successes and everything else that will convey the impression that the honey supply is practically inexhaustible. I think it was A. T. Stewart, the millionaire merchant of New York, who, when asked the secret of his success, replied: "When I got a good thing I stuck to it and said nothing about it." And that is a rule that will apply equally as well to beekeeping as to selling dry goods.

We would call a merchant crazy or foolish who would act as we have been doing,

and why is it not just as foolish in the bee-keeper as in the merchant? For myself I can't see the difference.

JOHN A. PEASE.

Monrovia, Cal.

### THE BEE-HIVE.

If two or more swarms cluster together, do not hive them thus, but hunt out the queens and divide them, especially if they are first swarms and large ones. Valuable queens are saved by so doing.

Drones from pure Italian queens vary all the way from black to quite yellow, while the bees should be uniformly marked, having three distinct yellow bands. The fact that drones from a yellow queen do not show any band whatever is no evidence that the queen is not pure. It is also true that queens vary just as much as the drones in color.

Judging from present prospects it looks as if there were going to be an enormous crop of honey from white clover, says Gleanings in Bee Culture. The tendency on the part of a good many will be to rush their honey off to the cities, and, of course, this will make a glut on the market. Beekeepers ought to make every effort possible to dispose of their honey around home. Create a home demand. Make it as attractive as possible, and help the grocers to sell for you.—Southwestern Stockman.

### ARRIVED ALL RIGHT.

TRAIL, Oregon, Aug. 9, 1897.

Bennett Bee-Hive Co., Los Angeles, Cal.:

Dear Sirs—The queen received July 15th, in good condition. I immediately introduced her to her new family. In six days after I found eggs in two frames. She seems to be very prolific. I received queens from two other breeders at the same time, but I am sorry to say they were both dead on arrival. Your cages are different—giving more ventilation. With your method of shipping you are sure of success.

Yours truly,

PERRY ELLIS.

### ANOTHER ORDER.

TRAIL, Oregon, Aug. 13, 1897.

Bennett Bee-Hive Co., Los Angeles, Cal.:

Dear Sirs—Enclosed please find one dollar and fifty cents for two of your untested Golden Italian queens. Ship as before, giving plenty of ventilation. The bees are hatched from the one I received of you last month. They are beauties! Can be easily distinguished from the old bees.

Send queens by mail to Trail, Jackson county, Oregon.

Yours truly

PERRY ELLIS.

## WILL OF THE WORKERS.

L. A. ASPINWALL IN BEEKEEPERS REVIEW.

Although it is generally understood that the economy of the hive is under the control of the workers, still not a few believe that such matters in which the queen performs a part or function, she may exert a positive guiding influence; notably, such instances as swarming, leaving the hive for mating, and, although to a less degree, in her individual function—egg-laying. Seemingly the possessor of a sole function, should also possess the right to exercise or use it. In considering the matter of egg-laying, we have a greater opportunity to ascertain many facts pertaining to the executive or governing power of the workers than in that of swarming, or mating of queens. We can begin the season with a small brood-nest and carefully note all actions until swarming takes place.

During the breeding season doubtless many have noticed the queen surrounded by a few workers, apparently paying her tokens of respect, and much has been written in confirmation of such theories. However, an examination of the colony previous to or after the breeding season will reveal a fact that the workers pay no more attention to the queen than to each other. Still, if deprived of her presence, they display evident signs of the loss. This, however, simply shows her important relation to the colony, which is recognized by the course of action taken by the bees.

When the breeding season approaches, the nurse-bees supply the queen with an increased amount of food, stimulating the ovaries to action and bringing about the laying of eggs. This stimulative feeding is increased until the height of the breeding season is reached, at which time her size and brilliancy are much greater than at any other period of the year. A few days previous to swarming this supply of food is withheld, and with the issuing of the swarm we find her much reduced in size, also greatly inferior as regards color. So this retinue surrounding the egg layer is not doing obeisance, but utilizing their powers of digestion to the furtherance of brood-rearing, and are servants, not only to the queen, but the colony.

I sometimes regard the queen as the greater servant, comparing her to the honey-ant, which is only a living receptacle filled by the worker ants until the abdomen becomes distended to an enormous size. Such is the relation of the queen to the colony—she subserves the will of the workers, and in so doing promotes the general welfare.

The drones are also brought into existence by the same will, which, when the requirements of the colony are such as to render them useless, not only withhold

their accustomed food, but drive them from the hive to perish.

If this executive or governing power of the workers is displayed in the general economy of the hive—comb-building, breeding and honey-gathering—involving an immense detail of work, and the display of various functions, we may logically conclude that it is exercised in swarming and mating of queens. As instance, I once had a prime or first swarm issue two or three hours after removing the old queen, the preparations (finished and unfinished queen-cells) for swarming being complete. That instance proved beyond a doubt (to my mind) that the queen simply unites with and is subject to the will of the workers in swarming as in egg-laying.

As regards the mating of queens, I have a abundant proof that the workers govern in this matter also. I have a great many times witnessed young queens as they left for mating, and in numerous instances the workers pressed or urged the queen to take flight. Notwithstanding this urgent persuasion, they often manifest great consternation during her absence. This is but natural when we consider that the perpetuity of the colony depends upon her safe return. Queens sometimes leave and return several times before accomplishing their object. Upon several such occasions I have seen the workers prevent their entering the hive and by force compel them to take flight again. I take this opportunity to remark that the queen is exceedingly timid when leaving for the purpose of mating, and most carefully marks the location of her abode.

## SMOKERS AND SMOKE FUEL.

I well recall the days of primitive smokers; Quinby's original being a plain tin tube about five-eighths of an inch in diameter, five or six inches long, and provided with a plug at each end. One was sufficiently long to serve as a mouth-piece, and removable for filling and cleaning the tube. Through each was bored a small hole for the passage of air and smoke. Tobacco was used as fuel.

Mr. Quinby's addition of a bellows certainly marked a new era and obviated the intense strain caused by constant blowing through the mouth-piece to keep it ignited. I now use the Bingham smoker, and regard it perfect in construction and working. While I have no special fuel to recommend, that which produces the largest and most satisfactory volume of smoke is from a spongy or partially decayed wood (notably white birch), but it also produces the greatest accumulation of carbon or sooty condensation. To remove the accumulation, a little gasoline poured into the barrel and cone will aid in burning it out. Separate them (take off the cover, using

long three teaspoonfuls for each, and carefully ignite, using a long stick. A single application will soften it and two or three will burn it to a crisp. I usually scrape out the accumulation after being softened, which lessens the amount to be burned. Care should be exercised not to burn the bellows. It is needless, perhaps, to add that this method of cleaning should only be undertaken when all fire and heat are absent.

The prevention of condensation causing the accumulation is extremely desirable, and far outweighs any method of removal. Thus far I have obtained a reasonable degree of success, and believe we shall yet have a complete preventive. My present plan is to use a little beeswax within the cone. By reason of the heat it spreads rapidly over the entire surface and to a great extent preventing the adhesion of the carbon particles. And yet I have not tried paraffine wax, but believe it will answer, although it melts at a lower temperature and possibly will need replenishing more frequently. It is certainly less expensive.

#### BUSY BEES NOT SO IRRITABLE.

All beekeepers of experience notice a gradual change in the disposition of bees as the season advances, when they become more irascible. The temper of all creatures largely depends upon whether they are occupied or idle. During the honey-yielding irritability manifests itself much less than in times of failure. While our bees are occupied we are also moving more frequently among them. At this season the fielders are rapidly wearing out. Their wings are reduced in many instances to half their original size; and, in consequence, they become fatigued, alighting upon the ground at various distances from the hives. In walking among them the casual observer will fail to see these veteran toilers, and in consequence many will be trodden upon. A few crushed bees, whether under a super or upon the ground, will call others in defense. I am exceedingly careful in this respect, and avoid as much as possible the treading upon or injuring a bee, although it may have outlived its usefulness. As stated in a previous article, I use no bee-veil; neither do I possess one, and I attribute the amiability of bees very much to humane methods in their management.

#### IMPORTANCE OF PROPOLIS.

Although much prejudice exists against propolis as a coating of the hive, making it impervious to air and consequent dampness, we ought not to lose sight of its importance. Certainly nature provided the proper material to carpet the home of the bee. Aside from its use as a cement or

gum, it serves as a foothold, and without its use I believe comb honey would be somewhat darker through compulsory travel upon it. The bee can walk and cling to propolis or wax more easily than upon board surfaces. However, we measure its importance from our standpoint, and although perfectly adapted to the requirements of the bee, still we feel as though the frames are less movable, and our fingers and clothing become soiled by it.

#### REMOVING PROPOLIS FROM CLOTHING.

I append this item more especially to furnish the reader a simple plan for removing it from clothing. Having used it for three years I cannot recommend it too highly as completely removing every trace from any fabric. It is simply to rub the soiled portion with a small piece of ice, when in less than half a minute it is rendered brittle, passing imperceptibly away.

#### FRESNO COUNTY SQUIBS.

Honey is coming at a fair rate for the time of year in many parts of the valley from alkali weed; in other localities rather light. Alfalfa is making a poor showing so far. The best crop I have heard of from the hills is seven tons from 250 colonies.

Many apiaries made a poor run (or walk) in the hills this season.

Yesterday I saw Mr. Roberts, our Inspector of Apiaries, and he reports foul brood in neighborhoods which were generally supposed to be O. K. Some colonies have been executed, and he has passed the death sentence on others. He says he is generally well received.

As the extractor is idle, I must quit for the present.

Fraternally, W. A. H. GILSTRAP.

P. S.—The above remarks on alfalfa only apply to Fresno and King's counties. Reports from Stanislaus and Kern indicate a good flow from alfalfa.

#### BEES IN SOUTHERN CALIFORNIA.

Bees in our section have gathered but little from the ball sage, more from wild alfalfa and wild buckwheat. The honey is of first grade. White sage is now in bloom and the bee take to it kindly.—California Cultivator.

#### PRICES FOR HONEY.

The opening price for honey is lower than last year, and some producers are holding for an advance. About 4½ cents is the ruling price. Complaint is made that considerable of the honey sent in is unripe and consequently will not bring top price.

## ITALIANIZING BEES—GETTING PURE QUEENS.

1. I have six colonies of the common black bees in dovetailed hives and want to Italianize them, but as I have never had any experience, will you tell me all about the most successful plan to do this? Would it be better to buy some Italian queens that are fertile, with 3-frame nuclei, and build them up with brood frames from my old colonies and not disturb the black queens?

2. Do you consider the Italian bees superior to the blacks?

3. Can you refer me to some reliable bee man from whom I can purchase Italian queens, and feel assured that I will get pure Italians that have been impregnated by a pure Italian drone?

Answers—1. It depends somewhat upon circumstances; if you do not care for expense, it would be an excellent plan to get 3-frame nuclei and build them up. If you have to send very far for them expressage will be quite expensive, whereas a queen will be sent by mail a thousand miles just as cheaply as ten. You can get untested queens for the least money, with the likelihood of having most of them pure and purely mated. By paying perhaps 50 cents more, you can have all tested queens. Perhaps a good plan would be to get one tested and the rest untested. Then you would be sure of having one true to breed from, and for practical work you will probably find hybrids just as good as pure. But you should have pure blood to breed from, for with black blood all around you you will find it very difficult to keep Italian blood in the majority. Your text book will give you full instructions as to introducing, and generally instructions are sent out with each queen.

2. Decidedly. And that's the general opinion of beekeepers in this country, although across the sea there are many who prefer blacks. Some think that the blacks in this country are not as good as those in Europe.

3. Probably any one whom you may find in the advertising pages of the journal would send you just such a queen as you describe, if you order from him a "tested queen."—American Bee Journal.

## CLIMATIC INFLUENCES.

An observing beekeeper in Indiana says that under climatic conditions strawberry blossoms have no attraction for bees; while under other conditions they work on them freely and their distended honey sacks gave evidence that their labor was amply rewarded.

In some seasons bees scarcely touch blackberry blossoms, but this year they literally swarmed on them. His conclusions were that certain flowers require a clear,

dry and warm atmosphere to produce nectar while others require the opposite—a cool damp season.

Clear days and hot sunshine make the white clover productive; but the bees do not visit it early in the morning.

Buckwheat, to yield much nectar, must have a cool, lamp atmosphere, hence the cause of its being a poor pasture in this country.

## BEE SPACES IN HIVES.

There seems to be an animated discussion going on amongst Eastern beekeepers in regard to the practicability of bee spaces above and around the brood frames.

W. Z. Hutchinson, considered a very reliable authority, advocates the space system, and the correspondent "Pennsylvanian" who antagonizes his theories, claims that his principal argument is that it is "handy." The latter says that he used it himself for many years for the same reason, but of late has entirely abandoned it and, in fact, declares the space system "an abomination." When doctors disagree, who shall decide? The most popular method here seems to be to leave a quarter of an inch space all around and on top. A larger space is detrimental, as it is liable to be filled with honey.

We had a pleasant call from some Arizona friends last week, Messrs. McIntyre and Ivy of Phoenix. Mr. Ivy we had known when a little bit of a fellow, and, of course, we did not recognize the big six-footer who stood before us as an old acquaintance. They were accompanied by their wives and had just returned from a week's visit to Catalina Island.

## LOW PRICES TO REDUCE SURPLUS STOCK.

Goods are in perfect condition, of good seasoned material. Will be sold at the following prices, while they last, delivered at our railroad depot, but no freight paid:

	1 30	75	35	25	30	20	20	08	12	10	20	00	25	00	8	00	2	00	7	00	24	00	1	00	
10 No. 3, 1½-story, 10-frame Dovetailed hives, last year's stock.....																									
80 No. 4, 10-frame Supers, exc. sections.....																									
90 No. 1, 10-frame Bodies (are made rather rough).....																									
50 10-frame Gable Covers (old style).....																									
150 8-frame Bottoms (clear stock)....																									
1 15-inch Dunham Foundation Mill not new).....																									
1 12-inch Root Foundation Mill (used some).....																									
2 Novice Honey Extractors take 12-inch frame).....																									
1 Dipping Tank (screened).....																									
2 Dadant Uncapping Cans (Root's make, new).....																									
3 4-frame Reversible Extractors (12-inch basket).....																									
4 Root, 1½ story, 8-frame Hives. ...																									

Cash must accompany all orders and reference must be made to "Surplus Stock," using names and numbers found in this list.

THE BENNETT BEE HIVE CO.

## Editorial Comments.

### INTERESTING ABOUT BEES.

A very intelligent writer furnishes the Scientific American with an able article on the means and power of flight of the honey bee. At first thought one, though an apiarist, would be apt to say that this was a matter of very little interest to him, so his bees stored plenty of honey. Not so; they are your friends and fellow-workers, and the more you know of their anatomy and their capabilities, the better prepared you are to handle them. Their occupation requires great powers of locomotion, involving strength, speed and endurance. This fact has led the scientist to make a critical study of the bee's anatomy, and the wonderful feats he accomplishes in his flights. They have been known to fly carrying a weight nearly double their own, in the shape of dead drones, for a considerable distance. Nature has supplied various pouches about their bodies for the transportation of nectar, wax and such other materials as they need for the construction of their store-houses and stores, and they are so ingeniously devised and placed about their bodies as not to obstruct their flight or lose their contents in transportation. So much interested did the writer of the article become in the matter that he set about contriving a machine to ascertain the number of vibrations per minute that the bee makes in his flights. Space will not permit us to give in detail a description of his machines; but with a set of clock-works and a smoked disk, after a few experiments he was able to accomplish his purpose. He then says:

While I realize that should I tell you that I had counted the vibrations and that they sometimes exceeded 15,000 per minute, and that I also have the certificate of the bee to the same effect, you will accuse me of treading at least on the borders of romance; yet I trust I shall be able to convince you that both assertions are practically true.

The certificate of the bee to which I refer might be interpreted thus:

I hereby certify that when in flight I

sometimes vibrate my wings at the rate of 15,540 strokes per minute.

(Signed, pointing to the wing tracks)

his

APIS A. MELLIFICA.

mark

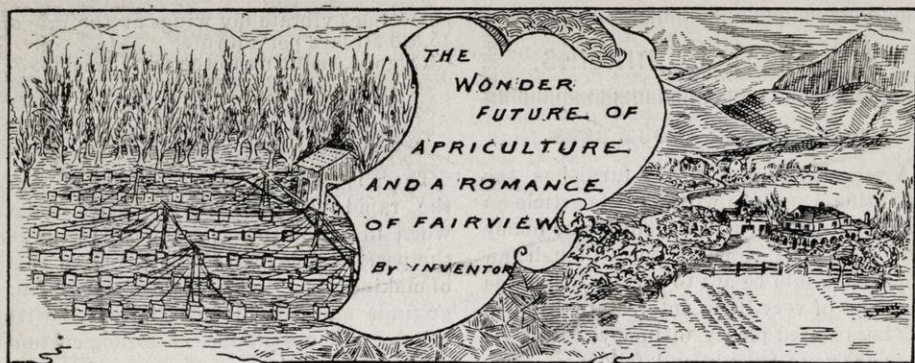
There is another matter connected with the rapid vibration of the bee's wings when in action that is no mean factor in the performance of its labors, beside that of making rapid flight between the feeding grounds and the hive. The speed with which he moves produces a strong current of air that accelerates the evaporation of the water contained in the nectar which he has gathered, and hastens the ripening process which must be accomplished before the cells can be sealed. Nor does the service of the wings end here. After the precious material has been deposited, a strong current of air is frequently produced in the hives by the united efforts of the swarm vibrating their wings without moving their bodies. Hence the perpetual humming that we frequently hear when near a hive, and their method of ripening the honey. I quote again from the author:

Never until honey is thus "ripened" will the cells be closed and capped for winter use.

The wisdom manifested in inducing these air currents is often readily apparent. The entrance to a hive kept in my attic for observation consisted of a glass-covered passage (between the hive and the window sill) of about 15 inches long by 12 wide, and half an inch high. During the honey-making season the floor of this passage was often so obstructed with idle bees as to impede the passage of their more industrious fellows. When it was observed, however, that the wings of these idlers were always in motion, so rapidly, in fact, that each clung to the floor to prevent flight, and that all on one side faced one way while those opposite faced the other way, thereby producing air currents in opposite directions through the same passage, and with the co-operation of those within through the otherwise nearly airtight hive, I have felt like apologizing to the toilers for my slanderous thought, and was impressed anew that "they also serve who only stand and wait."

So rapidly does this artificial process of evaporation proceed that it will be found by experiment that a hive will weigh less in the morning than it weighed the night before.





## CHAPTER X.

The writer said in Chapter IV that several months went by after the search for Basil by his family, that then Nellie Comblin suggested that the gypsies had possibly made away with him, and that on this clue search was made, but as the reader knows, unsuccessfully. Basil did write a letter about twenty-five days after his capture by the gypsies, but the letter was some time in reaching its destination, for the date of postmark on the envelope was nearly four months later than the date on the letter-head. But what a rejoicing there was on its receipt! The Comblins were notified, and returned compliments. All expressed great regret at Basil's detention in Cuba, but believed that he could not be persuaded to return home, from the tone of his first letter. Other letters followed, and both families were kept informed of the grand work Basil was accomplishing for Cuba. Finally a letter came telling of the siege of Havana, its capture and the surrender of the Spanish; of Basil's title of "Mayor of Havana," and all had hopes of his early return home.

Basil's father, knowing of his son's great interest in "Modern Agriculture," and its "Wonderful Future," had decided to investigate the "Apiarian Implements" and get Basil a modern apiary ready, to surprise him. So he first visited Prof. Comblin and learned all that Basil had learned months before; then he went to Los Angeles to see the supply factory and the honey store.

The honey store he visited first, and after a long conference with its manager he is let into a few secrets. "That the honey business is now one great combine; that none but good, careful beekeepers are allowed in the business; that none are allowed to handle their own product, and that there is no such thing as cut or low prices; that the bee men do not own a modern hive; that a great corporation of beekeepers owns all the improved honey

producing hives and bees; that the old hives having been destroyed long ago, these hives and bees are leased at a reasonable rate, and any profit arising from these leases goes to the members of the corporation, who are mostly beekeepers, and in this way, when a beekeeper gets careless or cuts prices, his business is taken from him."

The manager presents Mr. Bayton with a catalogue giving the address of the supply factory and headquarters of the beekeepers' corporation, which he next visits, finding a large factory on East Second street, covering many acres, devoted exclusively to the manufacture of supplies. A clerk meets Mr. Bayton in the sales-room, and our hero's father is shown over the factory; that being his wish, also the apiary, and here he is again surprised with improvements, for the extracting part of the hive seems nothing more than a two-frame nucleus set on the central portion of the brood chamber. In explanation the clerk remarks that one or two frames are all that are necessary to get the honey removed as soon as placed by the bees; that the honey is ripened by a patent process, but that comb honey is produced much as formerly, but the hives are arranged with greater facilities for removing the honey.

Mr. Bayton then goes to the office and makes his order, with the understanding that the goods are to be delivered and apiary fitted up complete, one half for comb, the other half for extracted hodey, being advised thus by the manager.

Several days after Mr. Bayton returned to the home ranch, the first load of goods appear, and in a few weeks the apiary is in shape, with the honey flow about to begin. The beekeepers' corporation send Mr. Bayton a competent apiarist to take charge of it till Basil returns home.

The American steamer reaches port San Pedro after about a fortnight's voyage. The time has passed quickly to Basil, hav-

ing so charming a lady as Miss Milford for a fellow traveler, and to look at them one could hardly decide whether they were a young married couple on their wedding trip, or only engaged, so interested were they in each other. On arrival at Los Angeles the young people part, Miss Milford for Pasadena, Mr. Bayton to remain in Los Angeles until his folks can be communicated with.

Basil has been five days in the city, and is rather surprised at not having received word from his folks. But just as he is leaving his hotel in the morning, up drives Charles and Maud with a beautiful span of blacks, Basil's favorite team, hitched to an easy running surrey. Greetings are of course profuse, and Basil leaves the city immediately. On arrival at the ranch Basil finds a company to receive him, Miss Nellie, Masters Fred and John Comblin, Miss Milford and their lady friends. Basil C. Bayton, "Mayor of Havana," is the hero of the hour.

A delightful evening is passed, though Basil is the greatest talker, being asked to relate his many adventures, which he does in an interesting way.

Next morning all prepare for a picnic, and some one speaks of an apiary. Basil is all interest at once. "Yes," says he, "I've got my apiary yet to perfect. I hope I will not be interrupted again."

Then there is a merry laugh from the company, and Basil inquires its cause.

"Why," says Miss Milford, "you said that rather sad, Basil; that's all."

Nellie notices the attention Basil pays to Miss Milford, and to Father Bayton she looks sad.

The picnic party is conveyed by wagons to the new apiary. "This looks like a honey harvest rather than a picnic. Hello! What's this? A modern apiary on the very plateau I had picked out for my modern apiary! Father, are you surely in the business?"

"No, my son; this is your own apiary, ready for business. So you see you've not lost your time," remarks Mr. Bayton.

"Well, friends, don't charge me with neglect, for my picnic's with the bees to-day," said Basil. "Of course I want company. Who of you are with me?"

"We are," said John and Fred Comblin.

"I'm not," said Miss Milford. "Bees and I are not very friendly."

"Come, Nellie; you will be with us," said Fred.

"Yes, do, Nellie. We must have one sweet lady, or the bees will take us for robbers," Basil declares.

So the others go over to the cañon for strolls among the wilds of the mountain nooks. After a while Fred and John steal off, and their disappearance is not noticed

by Nellie and Basil, so interested are they in the bees and the new hives. Basil sees a man working in the upper end of the apiary, and he and Nellie make their way to where he is. Basil asks an explanation of the working of the hives. The apiarist complies by taking a hive apart and showing his visitors that the extracting of the honey is accomplished by the force of suction from the inside of a honey comb. The extracting frame is constructed with a narrow tank, punctured full of holes. On the sides of this narrow tank are fastened sheets of comb foundation in such a way that the holes are in the center of the base of the honey comb. By this method the honey is removed from the inside, while the bees place the honey in from the outside. The comb honey is removed by shutting the bees off from the super, allowing them to get out but not to get back, by a mechanical contrivance that does not make it necessary to lift the super or disturb the hive till the bees are out. The apiarist takes great pleasure in showing the apiary to the young people, and especially to Basil, its owner.

But soon the apiarist goes to care for a swarm, leaving Nellie and Basil to themselves, which time they improve, as "doth the busy bee improve each shining hour."

The picnic comes to a sudden close by an unfortunate accident. Miss Milford has been bitten by a rattlesnake, it is feared. The party are all hurried into the wagon and driven back to the ranch. On arrival at the house, Dr. Haskel, a near neighbor is found, who treats the wounded girl for a very severe "Spanish dagger" spear. Part of the spear point remains in the unfortunate girl's ankle. The rattlesnake scare is accounted for when Miss Milford explains that she thought she heard a rattlesnake at the time of stepping on the dagger point."

In the hurry Basil and Nellie, up in the apiary, were forgotten, so Charles Bayton goes back with one of the wagons to get them.

Next day Miss Milford is much better, and the engagement of Basil Bayton to Nellie Comblin is announced.

Kind and patient reader, there is little more to say, save that a happier couple you never saw.

A month later a quiet wedding took place in the village of Fairview. Prof. Comblin gave the beautiful bride away. Mr. and Mrs. Basil Bayton set sail on the next steamer for Havana, Cuba, to spend their honeymoon, Basil thinking he was in duty bound to return and fill his office for a short time as "Mayor of Havana."

THE END.

### EXTRACTING HONEY.

Following are extracts from a letter written to The American Bee Journal by a well known Illinois bee man on a topic of common interests to beekeepers. Mr. Dadant writes:

The fact that bees are capping a comb of honey does not mean that the honey is sufficiently ripe. I have often seen honey work, or ferment, in such a way as to burst the capping of the comb. This happens more especially in hot and damp summers, when it is very difficult for the honey to ripen, owing to the dampness of the atmosphere. In an ordinary season honey may be considered sufficiently ripened when it has been on the hive for a week or more. The greatest trouble with unripe honey comes from that which is daily added to an unfinished super by the bees. During the first two or three days after it is harvested, clover or basswood honey is usually so thin as to shake out of the comb very readily, or even to drip out, if the comb is upturned. Such honey will not do to extract, unless it is afterward ripened artificially.

Messrs. Muth & Son of Ohio, who handle hundreds of barrels of honey every year, tell us that they ripen their honey by keeping it in open vessels, after extracting, in a warm and dry room. Thus it is quite likely that if the supers are taken out and placed where they can have air and warmth the honey will thicken and become ripe, but we prefer to leave such supers on the hive, even if we have to tier up to such an extent that it would become necessary to prop up the hive with sticks or braces. Not only would the bees ripen this honey faster than can be done artificially, but there would be also the advantage of the super furnishing them additional space for honey as fast as the quantity is lessened by evaporation. Consequently we would not start extracting until there was absolutely no room left for the bees to store honey, or so little that further delay would be likely to induce them to swarm.

There are several reasons why the bees work better in an empty super than in a full one—that is, provided the combs are already built. The hive being less crowded, they find the place to deposit their load much more readily and thus lose less time in hunting for empty cells. Then there is no need of building additional combs or whitening or stretching the combs already built. But when one super is full and the other only one story above it there is little time lost, and we believe it is a mistake to remove either before they are well filled unless more may be procured or unless the crop is at an end.

When the crop is ended, it takes but a very short time for the last honey harvested

to mature, and we make it a point to begin the extracting just as soon as the harvest ceases. There are seasons, however, like the present one, when the honey flow is so strong and so continuous that the bees get over-crowded and the supers are all filled long before the end of the crop. The only remedy for such a state of things is to take the chances of a little unripe honey and relieve the hive of its load before any time is lost by the bees or before swarming preparations are made. When there is any doubt, however, as to the ripeness of the honey, it is well to follow the Muth method and keep it in open vessels in a hot, dry place for a few weeks before attempting to put it on the market.—Riverside Globe.

### THE BEE MEN.

The honey bee has done good work this season, yet the owners of the busy insects do not wear that broad smile of contentment usually found with the man who has all things coming his way. More than one owner of an apiary in or near this city has on hand several tons of as fine comb honey as was ever put in comb. Yet there is something lacking to make those owners feel like setting up the watermelons, and that something is the scarcity of buyers and the small price offered for honey by the few buyers who do show up.

The best price quoted to producers for fine white comb honey is only 8 cents. When never a pound of it should be sold for less than 10 cents, at least. The offers for the strained article are fully as bad. The average is 3½ cents a pound, and this is not a fair price.

A good many of those engaged in the production of honey in and around this city are so fixed, financially, that they can hold their crop, and if they do, it means that they will get better prices later on.—Riverside Enterprise.

### For Sale or Exchange.

*Notices under this head at one cent per word.*

**FOR SALE**—Fifty colonies of hybrids, bees, in new, painted, one-story Heddon hives. \$3 per colony. MILO SMITH, Long Beach, Cal.

**EXCHANGE**—Good gold mine in Southern Oregon to trade for a bee ranch and bees in Los Angeles or San Diego counties. Address, W. A. Johnson, Santa Monica, Cal.

**WANTED.**—Beeswax. See page 19.

<b>GOLDEN ADEL ALBINO.</b>	<b>TEXAS QUEENS.</b> Dr. Gallup of Santa Ana, Cal., says they are the best he has in his yard. J. D. GIVENS, Lisbon, Texas. Box 3.
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### Price of Comb Foundation.

Based on Wax at 25c per lb., subject to change.

	No. sheets Size. to the	per lb.		
		10 lbs.	25 lbs.	50 lbs.
Heavy Brood, $7\frac{1}{4} \times 16\frac{1}{8}$	6	\$0 50	\$0 40	\$0 35
Medium, "	7	50	42	37
Light, "	8	55	45	40
Thin, surplus, $3\frac{3}{8} \times 15\frac{1}{2}$	21	55	45	42
Ex. Thin, surplus "	28	60	50	45

### Price for Making Up Foundation

From Wax Furnished.

	per lb.	10 lbs. 25 lbs. 100 lbs.		
		\$0 12	\$0 10	\$0 09
Heavy Brood,	per lb. ....	13	11	10
Medium "	" ....	13	11	10
Light "	" ....	15	13	12
Thin, surplus,	" ....	25	20	15
Ex. Thin, surplus,	" ....	30	25	20

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All Foundation is neatly packed in boxes, with tissue paper between each sheet, and delivered by railway or boat, by direct routes in Southern California, in lots of 75 lbs. or more, or with other goods.

**Notice**—Reduced Prices for surplus Foundation. Prices for making also reduced. Our Foundation is excepted by the bees in a recent test, better and combs much quicker finished than the patent Weed Foundation or Drawn Comb, though the Weed and Drawn Comb had preferred location in the supers.

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Section Holders, any size, smooth sawed .....	\$1.25 per 100.	\$11.00 per 1,000.	
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Slotted Sawed Separators (Basswood) .....	85 per 100.	8.00 per 1,000.	
Sawed Separators, 3½ x 17, 17¾ or 18 .....	60 per 100.	4.00 per 1,000.	
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Daisy Foundation Fastener .....	\$1.25.	Without Lamp, \$1.00.	
Sections, Formers or Folders .....	.50c per 100.	\$2.50 and \$3.25 each.	
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