The Pacific bee journal. Vol. 1, No. 4 October, 1896

Los Angeles, California: B.S.K. Bennett , October, 1896

The Pacific... Bee Journal

VOL. I. LOS ANGELES, CAL., OCTOBER, 1896. NO. 4

THE HONEY FAMILY.

Who are they? See "Pacific Gems." They look healthy. 120 pounds of honey per annum make them so. The little one has a colony of bees of her own.

CONTENTS

Entered at the Los Angeles Postoffice as second class matter.

The Pacific Bee Journal

Devoted to the Protection and the Advancement of Bee-Keepers' Interests.

PUBLISHED QUARTERLY BY

B. S. K. BENNETT,

365 East Second Street

LOS ANGELES, - - - CALIFORNIA

B. S. K. BENNETT,

Editor and Business Manager.

TERMS.—50 cents per year; two papers to same address, 90 cents per year; 3 papers to one address, $1.25 per year.

CLUB RATES.—Clubs of five, 40 cents each; clubs of ten, 35 cents each; clubs of twenty-five, 25 cents each. One can make money getting up clubs—just think, $6.25 for getting twenty-five subscribers, and some can get that number in one day.

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READ.

This money-saving Bee Journal is to be published monthly. Subscription price to those who pay before January, 1897, 50 cts. If not paid before July 1st, 75 cts. But thereafter the price will be $1.00 for the year.

We don't offer premiums for subscriptions, as we wish to use the money in making a better paper, and we hope to publish it semi-monthly, as soon as subscriptions guarantee. We will have our own press after January 1st, '97. Now it will take a good paper to make a success in our calling.

Free, a Year's Subscription for a list of names of bee-keepers, any number up to 25. Free, two years' subscription for list of names over 25. We wish a list from the following places. First lists will be honored.

Arlington	Lathrop	Poplar
Armona	Linda Vista	Porterville
Burgman	Lone Pine	Recluse
Berkeley	*Madera*	Rincon
Big Pine	Manzana	*San Francisco*
Capistrano	*Merced*	*San Jose*
Del Mar	*Miramar*	*Santa Barbara*
Encinitas	*Oceanside*	Soreno
Escondido	Onyx	Springville
Fresno	Palmdale	*Stockton*
Hanford	Paso Robles	*Tulare*
Hesperia	Petaluma	Visalia
Huron	Placerville	Wildomar
Lancaster		

Writers for this paper are made *free subscribers*, and are further paid if they wish it. But donated articles will help to make a good, cheap paper. Be prompt in remitting that 50 cent piece, and thus encourage the publisher. Remember, 50 cents a year for a monthly.

Those Gummed Labels found in this paper are to be used in answering advertisements, and by their use help you to obtain better prices. They are printed "Credit the Pacific Bee Journal." Stick these to the top of letter or postal card, thus helping the paper to gain customers among advertisers.

Photographs of yourself and your apiary are wanted by us.

A Bee Book on care of bees in the Pacific States will be published by us soon. One will be given free to those who write any new and labor-saving method of the bee management.

Good luck to you all.

Yours, B. S. K. BENNETT.

Colony Casting a Swarm.

Mr. Pond Hiving the Swarm.

This number completes the first volume for the year 1896. The four numbers will be bound and sold at 25 cents; single copies 3 cents each in stamps. These contain new and useful information, and can be used as a text or reference book. Order now.

The Pacific Bee Journal Supplement.

We publish this journal monthly after January 1st, 1897, and semi-monthly as soon as subscriptions and advertisements guarantee.

The price,

If paid before January 1st	$ 50
If paid before July 1st	75
After July 1st, for the year	1 00

Besides the Bee Department (which will not be smaller than our regular issue, but will improve and contain the most important issues of the business), the paper will thoroughly treat, in a new and enterprising way, Stock, Poultry and Farming Interests. Thus it will be interesting to apiarists as well as farmers, and bring the producers in closer union, also greatly aid us in making a paper unsurpassed in value to producers as well as advertisers.

B. S. K. Bennett, the Editor

Advertisers, no other paper offers our advantages. Our paper is reserved and kept as a book of reference; at the end of each year they are bound, thus they are as good as a high-class calendar or catalogue.

The bees' product in the United States in 1896 was			$20,000,000
" " " "	Pacific States	" "	8,000,000
" " " "	Southern Cal.	" "	1,000,000

A $1.00 card will pay better than $25 invested in advertisements otherwise, for you reach the producers, the consumers, and not hobos.

We, the printers, guarantee this October issue is 4000 copies.

KINGSLEY-BARNES & NEUNER CO.

I, the publisher, guarantee that 4000 copies of this October issue are circulated among farmers and bee-keepers.

B. S. K. BENNETT.

A GUARANTEE

OF....

THE RUINED LOS ANGELES MARKET.

The Bee-keepers in Los Angeles and vicinity are walking in their own light by the the course they pursue in marketing their own product. We noticed during the months of July and August of last year, a sudden and great demand for both comb and extracted honey. We sold during these two months almost twice as much as we had ever sold in any two months, to the retail grocers, fruit stands, and even peddling wagons, consequently the great demand forced the price up, and still honey kept on moving. Suddenly the demand stopped, without any apparent cause.

A day or two ago we were handed a few leaves of this journal and noticing the article of The Ruined Los Angeles Market, in which we found a satisfactory explanation of the honey demand and its fall. Now, beemen, establish a wholesale price and a retail price, being careful to leave a good margin between the two, thus encouraging the dealer to handle and push your article. Don't give consumers the wholesale price, for at the time you wish to sell they do not use much, but the dealer should hold the product until the people are ready to use it. By selling your own honey in this way you will surely drive out all demand for the product.

Comb honey should be put in glass fruit cases of 24 No. 1 sections, having all the honey through the case as nice as those showing through the glass. Buy new cans and cases for extracted honey, and the buyers won't fear the coal oil mixture of dirty old cans. If these lines are followed you can yet have a good local demand.

Signed, SIMPSON & HACK FRUIT CO. (Incorporated),
Los Angeles, Cal., Sept. 16, 1896. Commission Merchants.

The Pacific Bee Journal.

DEVOTED TO THE ADVANCEMENT OF THE BEE-KEEPERS' INTERESTS OF THE PACIFIC SLOPE.

Published by B. S. K. Bennett, 365 E. Second St., Los Angeles, California. 50 cents per year, Sample Copy free.

VOL. 1. OCTOBER, 1896. NO. 4.

Pacific Gems.

BY B. B. BEES.

PIONEER BEE-KEEPERS AT LOS ANGELES CHAMBER OF COMMERCE.

J. Alpaugh H J Wilder John H. Martin
J. F. McIntyre Shelling Stubblefield A. B. Mellen
Squires Dr E Gallup Geo. W. Brodbeck
Dr. Millard Jno. J. Corey

THE picture of the editor, his queen and little queen appear on the the front cover. They are bee-keepers, but live in a hive with millions of bees; that is, their rooms are in a bee-hive factory. The kitchen of their hive opens out on an apiary of fifty strong colonies, and fifty nuclei of live bees. The little queen's play yard is shown on the following page. In this yard the editor spends all his spare time, always bareheaded.

* * *

THE editor often makes tours on his wheel. He has ridden over 5,000 miles, and often makes 100 miles a day, and has covered that distance in five hours and a half, on good roads, and in eight hours against the wind. He has carried a hive of bees on his shoulder when riding the wheel. The small pictures illustrating this article were taken by him with a vest-pocket camera.

* * *

COMPETITION—not opposition—is the moving spirit of the age. It may not be the prevailing spirit, but it is at the bottom of all true progress. Competition looks up encouraging trade, builds cities, sells honey, makes business. But opposition downs all trade, as it is composed of jealously, hatred, and strife. Competition is composed of honest rivalry, ambition and work. Competition pushes ahead, while opposition keeps us back, for we can't hinder our rival without hindering ourselves. [See editorial, "The Ruined Los Angeles Market."]

* * *

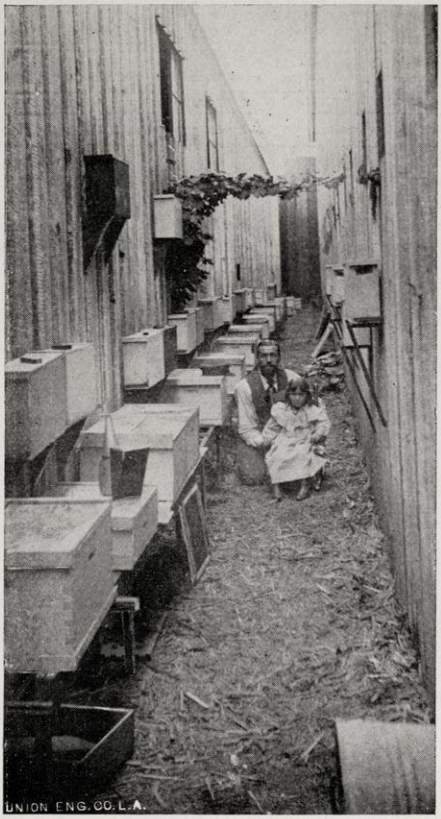
THE Mojave desert is yielding lots of honey this dry year. Wonder where the flowers are. Mr. Graham's bees are on the desert. He has ordered 100 120-pound honey cases, and he is a man who never orders without first having the honey in the tanks.

Mrs. C. Gray, of North Cucamonga, has extracted two tons of honey from 100 colonies this season. Her apiary numbers 165 colonies. This is the only honey we've heard of in Los Angeles county. Why cannot the bee-keepers learn her way and follow her example. Her theory is planting bee forage, and this shows her success.

Lemoore bee-keepers are buying extractors and tanks. This looks like honey production.

Mr. A. D. D. Wood and his Catalina Island Queen Rearing, where are they? He is doing little with bees, as now he is a full-fledged butcher of beefsteak.

War Ship Monterey—Double-deck Electric Car at San Diego—The Editor's Start.



LITTLE QUEEN'S PLAY YARD.

MR. THOMAS G. NEWMAN, the proprietor of of the American Bee Journal years ago, and at present publisher of the Philosophical Journal, a bright, newsy weekly Spiritualist paper of twenty pages, published at San Diego, also manager of the Bee-Keepers' Union, paid us a pleasant call this week. Mr. Newman states that the Union has a fight on hand in protecting a bee-keeper who planted clover on his own land, which clover was destroyed by the city authorities, and the expense of destruction charged to the bee-keeper. This outrage was committed on the strength of a city ordinance. We know the Union will win with Mr. Newman at the helm.

That thirty-ton honey storage and corner man, Mr. J. F. McIntyre, is holding this amount of sweets for 6 cents a pound, as he has a good Eastern demand. But don't any of you try this trick without the demand.

Prof. Cook, in Rural Californian, says the bees are busy on the pepper tree, after pollen, and getting little nectar. I find no peppery taste, and am of the opinion that the strong honey complained of and accredited to pepper blossoms comes from honey dew. The Professor does not know that the pepper taste comes from pollen and its fumes in the hive. He says also the queen controls the laying of drone or worker eggs, and that she knows when she deposits either, and pick the cell. He says too, that bees mate on the wing. Do bees mate?

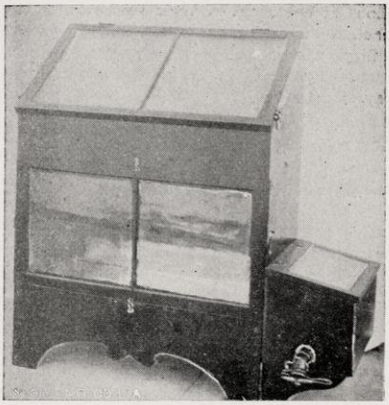
Big honey yield in the East is truly real, for Dr. C. C. Miller, the man whom we thought had given up all future prospect of honey production made a start by a finished super June 20, and by July 15 had taken the fifth super one from hive, now has 4,438 finished sections in the house, with more to follow. So the bees have routed good Mrs. Miller of the Annex to her kitchen (the honey room) of which she has had undisputed possession of for two years past. Trouble in the family by that troublesome bee.

Doc. Miller says, "If 'Weed' foundation is tougher than any other, won't it be tougher to 'chaw' in sections?"

"'Bees on the Desert!' Oh, when will that story wind up? It's drier than any desert, and a devil's lie throughout. Who's 'Skylark,' and that fireproof mule, anyway, is he a bee-keeper? Lord pity the bees, then." Thus writes one of our readers.

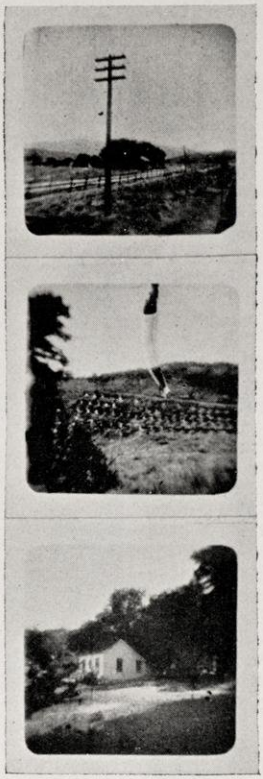
Dr. Miller, that straw, strange man of "Gleanings," said in last issue, "Don't use rosin in fastening foundation in brood frames. Some day you may want to melt up old combs, and then the rosin will spoil the wax. Don't use it to fasten starters in sections unless you want your customers to wonder why some honey has a bitter taste." That "don't know" straw man has a head on his shoulders, sure.

A pile of honey, 360 sections, fell on Doc. Miller on July 15, and just five sections spoiled. That honey would have been adulterated had it stayed with that doctor very long.



C. H. Schaeffle won't have any more wax musses, or the spilling of fifty pounds of hot wax on his wife's kitchen floor. He got a dandy double-sided heating 200 degrees solar wax extractor made for him by the Bennett Bee-Hive Co. He is an inventor by necessity, sure. The above cut illustrates the invention.

Hotel Del Coronado at San Diego—The Retunda of the Hotel—From the Hotel toward San Diego.



View above Newhall— Geo Tilton's Apiary —The Home of Geo. Tilton.

Views between Newhall and Acton.

Mr. C. W. Dayton called and showed us two sample frames of honey. One water white the other dark amber. Both are produced at the same time, but by different bees. The light sample by very hairy, light-color Italian bees reared by Dayton; the amber by black and Italian. Here's a big improvement for us. Who says no?

The Consumption of Honey and the Honey Market "Knocked Out," Honey as good as Sugar, and Building a Market, see editorials.

C. W. Dayton is a great bee man. He is getting quite a crop of honey this year. *But it's nearly over now.* He makes his own hives; has an entrance trap which catches all the bees any time of day and in one-half hour's time; only cost one cent. He has an escape that beats the Porter. This can be made for five cents. And a drone trap that lets the queen through to mate; this trap is kept in all *but* select drone hives. And best of all, he has a home trade for more honey than his bees produce. How's that?

Honey in San Joaquin valley, Central California, says A. H. Gilstrap is "Gleanings" 20 to 40 cars to go East probably. Mr. Daugherty is the king honey producer up there; has only 1400 colonies. They produce honey every year in the San Joaquin. Says Mr. Gilstrap, "Bee men sell honey, then toot their horns, that stuff adulturated (of course the buyers hear it), toot, toot! and here some more just as good. That stuff when it is not mixed.

Some writers are jealous of Dayton, because they can't write as well. Do you see the point? They ought to get more pointed bee stings, and learn some sense.

The old prophets are signing heavy rains and large crops next year. And these fellows have told the truth heretofore.

Remember, the East is having a booming honey year. Our turn comes next. We always follow the East in good seasons.

What is more tiresome for you to prepare, and unappetizing for your family to eat, than a hearty cooked dinner of meat, potatoes, etc., during the hot months? And what is easier to provide than a brimming bowl of honey, berries, bread, and milk.

Beecher wrote to his son, "Be a hard master to yourself, but lenient to everybody else." That's good advice for all of us.

The bees are on his hide, a clinging and a stinging. He's a rheumatic that was wise but Oh, that blumin' feeling.

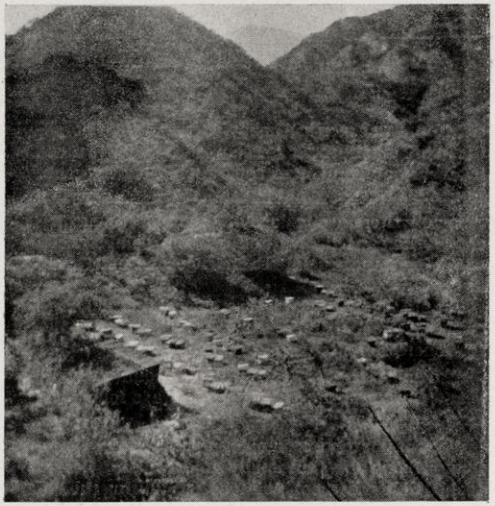
Outside Diagnosis of a Bee-Hive.

Detecting Queenless Colonies — Starving, Robbing and Paralysis.

BY J. F. MC INTYRE.

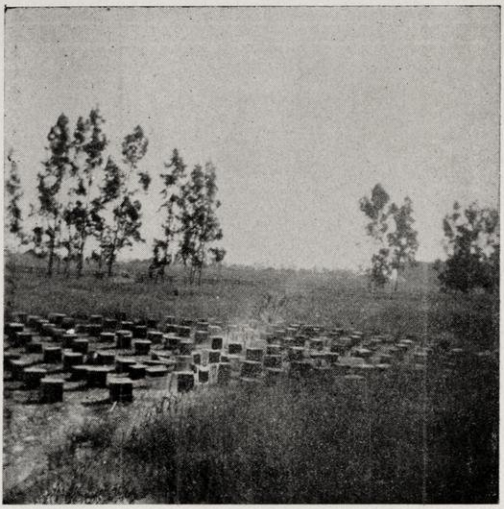
I choose this subject for an essay because it appears to be less threadbare than other subjects, and gives a better opportunity to say something new, and perhaps valuable.

When one becomes expert in judging the inside conditions by outside appearances it saves an immense amount of labor and disturbance by not opening hives that are all right. It is a case where a little wit in the head saves much labor for the hands. I have just now been making use of this idea to tell which hives need feeding, and in a few hours I have made a record of the weight of 200 colonies in this way. With a spring balance that weighs over 100 pounds I go along the backs of the hives and just weigh the back end; if it weighs thirty-five pounds I feed at once, because I know that they are just out of honey. The figures range from thirty-five to seventy pounds with supers on. To find which colonies need feeding and feed them at a time like this, when no honey is coming in and not get up robbery, shows a very skillful bee-keeper. And to be able to tell which colonies need feeding without opening the hives is a great help to prevent robbing.



Apiary of John A. Pease, Monrovia, Cal.

In the spring of a dry year when I do not want the bees to breed up strong or starve, I go up one row and down another and examine the entrance of each colony, at least every other morning, and when I find pieces of young white bees in the entrance I know that the colony is commencing to starve and are eating their brood, and I feed them five or six pounds of honey at once. In the spring of a good year while colonies may often be saved by a close watch of the entrances, it is not good bee-keeping to let colonies get entirely out of honey. A few hours after a colony has been made queen-



A Part of C. W. Dayton's Apiary at Florence, Cal.

less the bees will run excitedly over the alighting board and the front of the hive as if searching for her. This is worth knowing when you find a queen outside of a hive and do not know where she came from; after the first excitement is over it is hard to tell from outside appearances whether the colony is queenless or not until the cells hatch and the young queen is lost and the colony becomes hopelessly queenless. If the young queen fails to return when she goes out on her wedding trip the bees get excited and run about searching for her the same as they did when the old queen was lost, but soon settle down and become listless and dejected—more bees hanging about the entrance than in colonies that have queens. In the next stage the colony becomes weak and the bees look old, and if honey is not coming in robber bees will hover about the entrance. The next stage is a case of robbery, and the entrance blocked with robber bees rushing in and out. After the hive is robbed out it may be told by the pieces of wax on the alighting board and in the entrance. If not attended to at this stage moths soon destroy the combs and the entrance becomes blocked with the excrement of their larvæ.

(Continued on page 39.)

A Phenomenal Dry Year's Increase.

L. B. Dickerson of Norwalk, a novice, starting into bee-keeping November, 1895, with twenty-two stands, though short of money, increases, till now he has about 140 good, strong colonies, with plenty of honey, August 20, 1896.

Mr. Zinn of same place, starts at same time, with forty colonies, now has over 200 strong colonies.

B. S. K. Bennett starts August 1, 1896, at a location ten miles south of Los Angeles, with two colonies, now has eight full colonies, and expects to have sixteen full colonies by September 15, 1896. All by the use of introduced queens and full sheets of foundation.

Building Out Foundation.

Bees in the Bean Field—Bean Honey Has No Superior—Nucleus Swarms—Mr. J. S. Harbison's Expressions—Bright Reports.

BY M. H. MENDLESON, VENTURA, CAL.

MR. B. S. K. BENNETT:

Your letter of the 14th received sometime ago and was very busy in the bean fields or I should have written before.

My last letter was written to Mr. Brodbeck (as I thought he was with you) asking him if he wished me to continue for your Journal, naming subject, etc., but not receiving an answer I thought you did not wish me to continue, and no offense taken. As to compensation, I did not expect it, as I wished to help the good cause along. If you insist upon compensation, why then, I have nothing to say, and leave that to you, whatever you think is right. Knowing you cannot afford to pay much on your new venture, I shall not expect much. I shall need something in your line another season. I have been somewhat disappointed with this season on account of so much *high* fogs, and so little moisture; as we usually have very wet fogs, as it effects the honey flow in the bean fields to a considerable extent; although my bees have filled up in fine condition for winter, I'll not get a half crop of surplus from this source, and has saved me many tons of feeding for the winter, as the sages were an entire failure. I have about seven hundred colonies in the bean fields. The honey when thoroughly ripened has no superior, both in color and flavor, but if taken off green or partly so, it sours in a very short time. The sage I can take off when about two-thirds or nearly capped, but the bean honey has to be well capped, and then left upon the hive for a time, for safety.

If I continue, in the future, moving to the bean fields, I should have all my surplus combs made for the following season's use.

Last season and this season I have had a large amount of foundation drawn out during the bean flow, and the results have been quite satisfactory. The last of June being about the end of the flow of honey from the sages, bees are usually in splendid condition for the bean flow, which commences about the first of July in wet seasons (this season being an exception). Now, if the bees are properly and carefully moved in the favored localities among the beans, they will fill up and crowd out the brood in a few days. This is the time to have foundation drawn out profitably for the present as well as for future use.

Beginning, I lift out the heaviest combs of honey from the sides, avoiding, if possible, not to raise any brood, replacing these vacancies by spreading the balance of the brood, *leaving alternate vacancies between well filled combs of brood;* into these vacancies I put frames of full sheets of foundation; in two to three days the foundation is drawn out and nearly filed with beautiful water-white honey, as the queens rarely have a chance to lay into these new combs. I lift out these new combs of honey and put them into supers for weaker colonies, not strong enough to build their own combs, but are in the right condition to store honey. The above vacancies I replace with new frames of foundation to repeat as before. A super of these surplus combs of honey are quite an incentive to draw bees of the super, and gives the queens full sway in the brood department, as bees are naturally inclined to crowd out the brood department at the beginning of the bean flow, and more so, if allowed to crowd the brood before putting on supers, as the experienced well know.

Putting in foundation between irregular combs should be avoided if possible. Foundation drawn in the brood department, I have finished in the super and have better combs by being well fastened to bottom bar and seldom any sag when using six sheets to the pound. Foundation to be drawn into the super I prefer five sheets to the pound, and now and then one will sag during a heavy honey flow.

My weaker colonies (nucleus swarms) that are not strong enough for supers, I keep drawing out foundation, as they usually fill these new comb with honey, they crowd their brood in a small space, although having plenty of room for storing. The extremes, from the closing out of the sage flow by evening of one day to the sudden flow by the next morning, seem to change conditions within the colony. During a sage flow, I work my bees somewhat differently.

This is for the benefit of the beginner.

No doubt the experienced will differ from me on some of the foregoing practices.

P. S.—I was well pleased with your P. B. Journal, and more so with your last, *a bright, newsy journal.* But excuse me for criticising your method of publishing reports of big prospects of crops without giving dates. It has a bad influence on prices, as the unprincipled take advantage of the same.

I agree with J. S. Harbison, as expressed by him in 1880, at one of the bee-keepers' conventions at Los Angeles, "That if these bright reports were left unsaid it would be better for the fraternity financially," or words to that effect.

[Your letter to Mr. Brodbeck was not handed to me, and as he signified his intention of starting a bee paper, as he could not run mine, he probably thought to keep you for a writer for his paper. Let us cheer the brother's paper and hope it will not meet with the failures that his associations have that he has started from time to time. I see the last directory is out, with G. W. Brodbeck, President of the Los Angeles County Association, in large type, type display, sure, "my name in print." Your "Building out Foundation" brings out new light.—EDITOR.]

Profits of Fair Exhibits.

BY JNO. G. COREY.

Having been asked to give my opinion on this question, I will briefly give it:

First. Fairs only last a week, which is too short a time for an exhibit to be of much benefit either to the exhibitor or attendant at fairs.

Second. The great expense in properly preparing bees and bee-keepers' appliances for exhibtion at fairs, and the constant care of an attendant are too great, when the profits arising from such exhibt are taken into consideration.

Third. The great interest taken in and fostered by our Agricultural Fair managers in horse-racing and pool-buying and selling, so completely absorb all other interests that I favor turning the whole matter over to the jockeys and turning our attention in a different direction to bring our pursuit before the people.

The horticulturists, dairymen and bee-keepers have meetings at stated times, and improved methods should be discussed and plans laid at these meetings for managing the different industries to the best advantage for producers, and the preparation of products for market in as perfect manner as possible.

The permanent exhibit maintained at the Board of Trade rooms should be encouraged, and contribution from bee-keepers and manufacturers of supplies should be added from time to time so as to vary the appearance, and not allow it to assume a stereotype form.

The advantage of exhibiting new appliances and methods at meetings of a special character, are that the exhibitor has attentive listeners, and feels that he is not casting his pearls before swine.

Thompson P. O., Cal. (Solidad Cañon).

[Mr. Corey has taken the wrong side of the question, so I will proceed to knock him out, though he is a bigger man. First. The benefit of a week's exhibit, in increasing a honey demand, is better than none. Second. The expense is really our present worthless time, and who does not want to see a fair? Then the profits are in prizes. I carried away $40.00 last year and could have got more. Don't that pay? Then I sold lots of honey, advertised my bee and bee-hive business, and had a week of fun. Third. These prizes I hope to have raised this year, and I want competitors to help gobble the prizes, and bee men to advertise their honeys, and then the Agricultural Fair managers will take more interest in us. Now, bee-keepers, don't you believe it's better to get paid in coin for your exhibits, have the privilege of a free hall to sell in, and a free pass to the fair grounds, with lots of fun, than to expend money and time on permanent exhibits? Of course they both are good, and we ought to have them. But which pays the best, all round? Those wishing to make exhibits at the fair, and do not wish to attend, or Chamber of Commerce, may place them in my charge.—EDITOR.]

INDUSTRIAL EXHIBITION—PRIZE LIST 1896.

Class 54.—Bees, Honey and Apiary Supplies.

Sec.		1st Prem.	2d Prem.
1	Honey, Display Comb in most remarkable shape, product of one apiary in 1896	$5	$3
2	" Display and Quality Extracted, in most marketable shape, product of one apiary in 1896,	5	
3	" Comb, not less 20 lbs. quality to govern	3	
4	" Extracted, not less than 20 lbs. in glass, quality to govern	3	2
5	" Best granulated, in glass, not less than 10 lbs	3	2
6	" Crate Comb, not less than 20 lbs. in best shape for shipping and retailing	3	2
7	Bees, Colony of, properly named, must be the progeny of 1 queen and exhibited in such shape as to be readily seen on two sides. Purity of race, docility, size of bees and numerical strength to be considered	3	2
8	Display of Queens, to be put up in such shape as to be readily seen by visitors—blacks not to compete	3	2
9	Beeswax, not less than 10 lbs	3	2
10	Comb Foundation for surplus honey, not less than 10 lbs	3	2

Sec.		1st Prem.	2d Prem.
11	Comb Foundation for brood chambers	$3	$2
12	Honey, Vinegar, not less than 1 gallon	3	2
13	Display of Apiarian Supplies, exhibitors' manufacture	Diploma	
14	Comb Foundation Machine, making best foundation for brood chamber on the ground..	"	
15	Greatest variety of Queens, put up in same shape as for display of Queens	"	
16	Bee-hive, for all purposes in the apiary	"	
17	Best Bee-hive, for extracted honey	"	
18	Best Bee-hive for comb	"	
19	Honey Extractor	"	
20	Wax Extractor	"	
21	Foundation Mill	"	
22	Foundation Press	"	
23	Best One-piece Section for honey	"	
24	Best Dove-tailed Section for honey	"	
25	Package for retailing Extracted Honey, labeled	"	
26	Bee Smoker	"	
27	Bee Feeder	"	
28	Largest and best display of Honey-bearing plants, properly named and labeled	"	
29	Queen Cage such as is admitted to the mails by postal laws	"	

Entries made without charge, must be made before October 10th. Entries can be mailed to the secretary, M. F. Brown, 127 North Main street.

Direct articles of exhibit to Sixth Agricultural Association, or to your humble servant.

Los Angeles, Cal.

I will offer an order for $25 worth of hives to the man who comes the greatest distance outside this county, and exhibits at this fair; will give $5 cash to the man who sells the most honey at the fair and in the exhibit building, and $3 to the man who will handle my colony of bees in the wire cage without being stung. Now all come and see the fun on Saturday, October 17th, at 10 o'clock. Will give $3 to the man on Saturday who comes from the greatest distance.

I will try to get a special prize for the best exhibit. Yours,

B. S. K. BENNETT.

"Corey, come along."

Exhibits must be in place by October 10th.

Dry Year's Increase of Two Colonies to Thirty.

DR. E. GALLUP.

I started in last spring with one good stock of bees and one poor stock with an old queen. I found three swarms and now have thirty, all Italianized and in first rate condition. Shall probably make a few more if they keep on gathering honey as they are doing now. How is that for high in a poor season? You know that I am only a beginner in the business; do you think any of your old hands at the business could do much better if they should try in such a season? If you do, just let us know who they are and we will try again. Made all my own hives by hand and attended to my other business. Have purchased eight dollars worth of foundation, purchased and had donated ten queens. It was so cold during April and May that I could not raise queens and get them fertilized. I was seventy-six years old Saturday the 22d.

Santa Ana, Aug. 24th, 1896.

[All will have to own that you are a great bee-keeper. A beginner, yes, the above looks like it. Dr. Gallup is the inventor of the Gallup hive, which is used to such an extent in California apiaries. Quite a doctor to, for he doctors without medicine, with wonderful success. Speaking about his queens, look to July number and see Dr. Gallup's "Entertainment of Royal Guests." Yes, keep on Doctor, you'll make honey when all us other bee men have quit the business.—ED.]

Bees and Their Care In Bee Journals.

Turning a Few Dollars.

BISHOP, INYO CO., CAL., July 14, 1896.

TO THE PACIFIC BEE JOURNAL:

Gents: I have received the January and April numbers of your journal, and now you will please find enclosed fifty cents P. O. order, my subscription for '96. I am well pleased with the numbers received. May the PACIFIC BEE JOURNAL live long and prosper. No wintering problems; no gardening; no travels; no *religion;* nothing but bees and their care, and how we may make them turn a few dollars. That is what we want.

I have and work 250 colonies of bees, and in '96 put on the market ten tons of comb honey and one ton of extracted. I will not get that amount this season, but the quality is superb. It is too soon to tell what amount I will have.

I would also become a member of the Exchange, but am too remote to receive any benefits from it.

With best wishes for the PACIFIC BEE JOURNAL and Bee-Hive Company,

I remain, yours, etc.,

T. F. A. CONNELLY.

LOS BANOS, Merced Co., Cal., August 4, 1896.

FRIEND EDITOR: Find inclosed a short article, written for the JOURNAL. If you choose to publish this I shall write for OUR journal. Send a sample copy of next issue to Fred Filbourn. I am going to see the bee-keepers in my vicinity and see what can be done for *our* JOURNAL. Yours,

E. L. DICKINSON.

Bees and Pepper Trees in Los Banos.

BY E. L. DICKINSON.

Our surplus is light though the bees are well supported; the amount of surplus will not supply the home demand. The quality is light amber, the sections are well filled, and as uniform in weight as though we were having a fine season.

I will try and give the readers of the PACIFIC BEE JOURNAL an idea how the bee industry is carried on here. The bee-keepers are few in number, and, if I must say it, some of the bees are badly kept; or, practically speaking, not kept at all, to the sorrow of the poor bee, etc., so-called owners or keepers. Boxes of every size is their hive, so let us hope to have some pattern drawn in respect to the welfare of the busy little bee in the future.

The pepper tree has had two articles lately in our Journal. There are a great many of these trees in this vicinity, which are used for shade trees along our streets and yards. And I agree with friend R. Wilkin in respect to honey gathered from this tree. While the trees are in full bloom the bees work diligently upon them, and the storage of honey apparently increases. But the quality of honey, according to my taste or notion, does not decrease in flavor, or taste the least peppery. There is also no complaint of it in our home market. It sells just as good as honey made from any other plant or shrub, and I, for one, cannot see why this tree should be despised or shunned by the bee-keepers.

The planting of more of these trees would assist the bees, as it is a sure thing for honey every year, especially in my vicinity, where they are kept well watered as they are here.

Los Banos, Merced Co., Cal., August 4th, 1896.

[Thanks for your kind words and interest in *your* journal, Bro. Dickinson. Wish more would feel like you and try to help their journal, for it is for their good and not mine. I agree with you in the pepper trees' non-flavor of pepper in honey, for my bees gather pepper tree nectar. But only did I detect the pepper flavor on eating comb where pepper pollen was deposited. Those bee men up there ought to have a present of a lot of modern hives, so show them the BEE JOURNAL, and get their subscription of fifty cents for a year.—EDITOR.]

Bees in Arizona.

BY WM. H. BARTLETT.

I have only kept bees for a year, and know very little about them, but I like the business, and Arizona is a very good place to keep the little rascals.

One big advantage that we in the southwest have over the eastern bee men, is the short, warm winter, in which the bees consume very little honey.

I started this year with two bee-books, a years subscription to the Pacific Bee Journal (which every bee-keeper should have), all the supply catalogues that I could send for, and seven stands of hybrid bees.

I have taken from those seven hives about 150 pounds of comb honey, and 10 new swarms which are all doing well.

Am going to try 10-frame hives next season, as I think that size is better for this hot climate.

I sold all my honey for 10 cents by "working the home market."

I wish success to the Pacific Bee Journal, and glad it is edited by a man that understands bee-keeping in the Southwest.

Perfect Apiculture.

BY C. H. CLAYTON.

You ask, has bee-keeping reached perfection? I answer, most assuredly, no; it has not. Neither the present, nor the generation to follow, will see perfection reached in the art, perhaps I would better say *science*, of bee-keeping.

Advancement is one of the great laws of our being. When we cease to advance we begin to retrograde.

In no line of human endeavor has there been greater advancement than in the care and management of bees; yet he would be foolish indeed, who would say we had reached perfection in bee-keeping.

There is room for improvement all along the line. We need to learn how to control the swarming impulse; how to control the mating of the queen. I believe the time will come when we can control the breed of the bee as surely as we now can and do that of any of our domestic animals. Our tools, too, can be improved. I believe we will have in the near future extractors run by electricity, and removing the honey from both sides of the comb without the labor of reversing the combs. We will also do our uncapping by electricity. Improvements will also be made in foundation mills, enabling us to make foundation with cell-walls nearly,

if not quite, full depth. Smokers, drone traps, honey-boards, all can and will be improved. Improved methods of ripening and preparing honey for the market—aye! and marketing it too—will be discovered.

In a word, I do not now recall a single thing connected with bee-keeping that can be said to be perfect. These many improvements will not all come at once. Time alone, coupled with the inventive genius of the Yankee race, will enable us, as the millennium draws nigh, to approach nearer and nearer to that beatific state—

"When this sceptered isle,
The earth of majesty, this seat of Mars,
This other Eden—demi-Paradise—
This fortress built by nature for herself,
Against infection or the hand of war;
This happy breed of men, this little world,
This precious stone, set in a silver sea,
Which serves it in the office of a wall;
As a moat defensive to a house,
Against the envy of less happy lands."

Time will bring us nearer and nearer to perfection in bee-keeping as in all things else, but—

"While there's life on the lip,
While there's warmth in the wine,"

let us still strive for advancement.

Improving the Forage of Bees.

BY W. D. FRENCH.

Perhaps there is no subject more vital to the interests of bee-keepers at this period than the solution of a question, which has been somewhat discussed in the journals, relative to the "Forage of Bees," not only in the State of California, but in all parts of the United States.

Failures of the honey crop throughout the country are becoming more numerous as advances are made in the cultivation of the soil. It is apparent that something should be done by way of planting, substituting domestic for the natural.

Many people who, at one time, devoted their entire energy to the culture of bees, have been driven to diversity by the repeated failures of the honey crop.

As time moves on, there is little doubt as to its continued depression, unless obviated by the cultivation of plants.

Climate and soil in different parts of the United States are so much at variance, I will only treat with the requirements of California in the light as I see it.

Localities that are favored by the cultivation of alfalfa, citrus fruits, and other domesticated plants, are not considered, and do not apply within the meaning of this article.

The advantage which California holds over other States in the production of honey is mainly due to the vast amount of waste land extending over our mountain country, that is not adapted to a diversity of farming, and only seeks to invite a home for the honey bee.

It has been suggested, and also practiced, sowing seeds of the different sages and other distinguished nectar-bearing plants, over the hills and valleys, in order to furnish ample pasturage for the bees, and thus stimulate the present by an additional profit to their keeper; to what extent or value this practice may command, I am unable to state; basing my judgment upon personal observation, I feel justified in making the assertion that this proposition will not meet the desired effect.

Seasons that are blessed with sufficient rainfall will always insure a bountiful crop, and in most localities planting under such conditions is not a real necessity.

In seasons of extreme drouth, where seeds have been scattered and plants fully matured or otherwise, do not produce nectar to any extent of profit; hence it is reasonable to contemplate other methods wherein a standard of profit may be maintained, and in order to insure profitable crops each year, I see no other means of accomplishing this result without planting something that will withstand the severe dry seasons to which we are often subjected.

The question may now arise, what are these plants? I answer, the eucalyptus.

This tree will thrive in many places
Where other plants will die;
On the hilltops, in the valleys,
Their especial favors lie.
Let us all unite in planting
The eucalyptus trees,
With their rich, inviting blossoms
Calling forth the bees.

National City, Cal.

A Simile.

High upon the mountain side lived an old man and his faithful companion. Their only occupation was that of keeping bees, from the products of which they were enabled to live comfortably.

In the valley below were a number of farms and orchards. In summer-time the bees from the mountain visited the valley and gathered large quantities of honey from the blossoms of the apple, the clover and the corn, in turn scattering the pollen and more effectually fertilizing the flowers, enabling the farmers to gather abundant harvests. In the fall, when the bees could no longer gather nectar from the flowers, they visited the cider-press, and often sipped the juice from the grapes that had burst from over-ripeness or which had been punctured by other insects or the birds.

The farmers regarded the little bees as great pests, and demanded that the old man must abandon his occupation. Failing to comply with their demands, they set fire to his little apiary, and barely escaping with his life himself and companion went to dwell in another country.

* * * *

The next year the crops were shorter than ever before; the clover yielded only half a crop of seed, the fruit was scrawny and the ears of corn were not so full and plump as usual.

* * * *

In the old man's little garden there chanced to fall a single seed of Canada thistle. It grew and multiplied a thousand fold. The next year the increase was a thousand times a thousand. When the autumn winds blew from the northwest the thistledown was scattered broadcast over the farms in the valley, and ere the farmers were aware their land was beyond redemption.

The thistles and mortgages took the farms and their once prosperous owners moved away.

* * * *

The old man returned with his bees to his mountain home. The product of his apiary was two-fold as much as ever before. But the bees gathered not the honey from the clover and the corn, but from the thistles, and spanish needles, and goldenrod and blackberry vines that had taken possession of the valley farms.—*Los Angeles Spectator, August 10, 1896.*

BEES ON THE DESERT.

A Mule that Founded a Large Apiary and is now Educating a Young Lady.

BY SKYLARK.

CHAPTER III.

Two days afterwards, as we all sat on the portico, Daisy asked, "How much honey will my bees, ma, gather for Mr. Grandpa?"

"Well, Daisy, it depends on the year, and the condition your bees are in when the honey comes. Some years each hive and their descendants may give you three hundred pounds of comb honey. The next year you may get nothing, or next door to it."

"Three hundred pounds!" cried Daisy, capering over the portico, "three hundred pounds of honey? And how many hives are you going to make, Mr. Grandpa?"

"Well, that depends on how many bees we get, and on your pa's lumber-pile. Do you think he will give us some lumber and tools, Daisy?"

Her large, blue eyes settled on her father's face, but seeing no answer there, she sprang into his arms and pillowed her golden head upon his bosom, while the long, silky curls hung down over his arm. Twice she raised up and kissed him, but said no word, and I thought she had forgotten all about the subject. All at once, however, she sat upright, and taking her father's face between her hands, squeezed his mouth into the shape she desired, and kissing him again, said:

"Will you, pa?"

It was so tender, plaintive and beseeching that it would have brought an affirmative answer from a stone-bound heart.

"Oh, yes. How can I refuse my little girl and grandpa, too? There is plenty of lumber and plenty of tools. I have a man here who is quite a carpenter. You may plan and mark out, but *he* must do the work."

"The first thing to do is to find the bees. We can then tell how many hives we want. *I* know where there is one swarm, that I will never forget. Daisy knows of several more. We will make five hives, anyhow, and more if we need them."

"Five hives and three hundred pounds to each hive! Oh! pa, what will I do with fifteen hundred pounds of honey? I don't believe we can eat that much in a year, and we've *got* to eat it."

"Ah no, Daisy, you can sell it. Just think, pa, of our little Daisy turning out a honey merchant"

"Fifteen hundred pounds of honey!" cried Daisy, as she danced about the portico, "how much will all that honey come to, grandpa?"

"Well, I think it is worth ten cents a pound all round, in San Diego. But you will be able to sell a good deal of it to neighbors and others at fifteen cents. But call it one hundred and fifty dollars; the even ten cents all round."

"That is fifty dollars for ma, fifty dollars for pa and fifty for myself. Wont we be rich?"

"Yes; but, Daisy, you may be disappointed. They may not give you one-quarter of that."

"Well, I'll take my chances on that. Fifteen hundred pounds of honey!"

"Brave little girl! She has got the fever bad."

Her father coughed and excused himself, as he had to write some letters. Her mother also went to attend to some household duties.

"Daisy! do you know where Ebenezer is?"

"No, grandpa, I don't know him. He don't live about here."

"But I mean the mule, *my* mule."

"Oh yes, I forgot. I go down and pet him every day. He loves me, Grandpa, and I love him, because he brought *you* here. He is down in the barn."

"Well, I want to go down and see him."

"But ma don't allow you to go off this

porch, grandpa. I'll go down, and Cousin Dick will bring him up."

In a few moments Daisy came back leading the mule, and with her a young man with great, honest, open, manly eyes that told at once that he could be trusted under any circumstances.

"Grandpa, this is my Cousin Dick, and oh, he's *so* smart. He's a carpenter, a mason, a tinner, a blacksmith, and a gunner, and knows everything—*everything*, grandpa."

Dick laughed as he shook hands with Mr. Grandpa, and said, "that's a great little girl."

"Does he know all about bees, Daisy?"

She looked blankly at Dick.

"No. I know very little about them. Long ago (he was only about twenty-two) I used to capture their honey—took it from trees."

"A carpenter, a tinner, and a bee-hunter! Why, you are the very man I want. Do you know where there are any bee-trees now?"

"Yes, lots of them; but wouldn't you rather have a whole cave full of bees and honey at once?"

I started to my feet.

"Young man," I cried, "don't raise false hopes in my heart which can never be realized. This is a terrible shock to a weak and nerveless spirit—it *may* prove fatal to me" —and I silently wept—a weep that went to that young man's heart, especially when he saw that Daisy began to cry also.

"But it's not a false hope, nor a false cave of honey, either, grandpa. I can take you to it any day—about five miles from here—and you'll see the biggest stream of bees going in and out that *you* ever saw, if you are a 'big bee-man,' as Daisy calls you."

"Hurrah! hurrah! Glorious!" I shouted at the top of my voice, as I caught the child to my bosom. "Dry your tears, Daisy, we are going to have a whole cave full of bees and honey."

The noise brought out Mr. and Mrs. Lawrence.

"Mr. Lawrence," said I, "your nephew, here, has told me news that will change all my plans; news of a great cave of bees and honey, about five miles from here. I want to see that cave today. I *must* see it before I sleep."

"Whose land is it on, Dick?"

"Old Jones', but he wouldn't go near it for a kingdom."

"Is it far up the mountain? Grandpa is weak yet, you know."

"Why, he won't have to walk but twenty steps from the wagon up a gentle rise to the mouth of the cave."

"Very well, after dinner put the carriage horses to the light spring wagon. Grandpa will tell you what to take along."

"Only a string or rope, Dick, to sound the bottom of the cave; the bee-veils and a lot of old rugs to make a smoke.

* * * *

Great Jerusalem! Jerico, Babalon and Ebenezer Hopplecat! Did you ever, man, since the world began, see such a storm of bees? The crevices in the rock extended from the ground up, about seven feet. For four feet up it was very narrow, from four to six inches. The remaining three feet at the top made a good entrance about two feet wide. On looking in I beheld a sight that rooted me to the spot. I could see the combs run straight back until the darkness shut them in from my view. I could see neither side of the cave. For many minutes I stood spell-bound and unable to move.

"False hopes, grandpa?" said Dick.

"Oh Dick, I beg a thousand pardons for doubting you. Come, Mr. Lawrence, and see this sight."

I turned and, setting fire to an old gunny-sack, stuffed it into the crevice below, and the smoke began to pour up among the bees.

"Well, well, this is beyond measure away ahead of all my calculations."

"Yes, and mine, too. Dick, help me up."

"But you are not going into the cave, grandpa, are you?"

"Yes, I am. Why, I couldn't sleep a wink tonight if I didn't find out all about what's in there. Besides, Daisy will ask me a hundred questions that I cannot answer if I don't go in."

Ah, then *you* are under petticoat-government, too, eh," laughed Mr. Lawrence.

"Yes; *little* petticoats, and such government is very dear to me."

Dick brought a rope-ladder he had provided, about twelve feet long. Throwing it all inside but about three feet, he stuck a cross-stick into the ropes, that caught on the inside of the rocks, and likewise one that caught on the outside, thus making it possible to climb up and go down on the inside on the same ladder. Dick is a genius. As I was about to climb, Mr. Lawrence said very gravely:

"Grandpa, I do not like — I seriously object to you going in there without we have some hold on you. Dick, if you have no rope, take the lines off the horses. We can splice them with the checks and make them long enough."

Tying one end of the lines around my body, I descended into the cave. It was about forty feet wide, but owing to the combs being built up pretty close to the entrance, I could not see how far back they ran, but I counted two hundred of them, that ran straight back into the darkness, and I was bound to find the end of them if I had to go clear through to China. I could

not walk upright under the combs, but had to go in a stooping position, as I slowly felt my way forward with my feet toward the back end of the cave. As I pushed onward there was nothing but dense darkness before me, but when I looked backward toward the entrance, I could see pretty plainly everything in the cave. Directly Dick shouted:

"Hold on, grandpa, till I get another string."

After some delay there was another shout: "Go on."

When I succeeded in reaching the back end of the cave, I found I was not there at all. I lit a match and found that the roof shelved down to within four feet of the ground, and that the cave terminated in a long, narrow entry that ran back into cimmerian darkness. I was, however, at the end of the combs. As I stood looking toward the light, I measured the distance with my eye, and determined that the cave was a hundred and twenty feet long.

"Well," said I, "this is the biggest hive I have ever manipulated, and if I succeed I may proudly claim that I have handled the largest hive in the world!"

At this moment I was startled by a low growl behind me, some distance back in the narrow entry. I peered into the darkness and saw a sight that chilled my heart and made the blood run cold in my veins. Four great balls of fire glared at me out of the darkness. I involuntarily fell upon my knees. "No animal," said I to myself, "has four eyes — four eyes that are living flames of fire! It must be the devil himself." The infernal old scoundrel must have known my thoughts, for he winked at me with his whole four eyes at once. This convinced me that I was right.

"Oh! Mr. Devil," I pleaded, "don't take me now. I have just got up from a bed of sickness and have no arms with me whatever. You know you have the reputation of being the meanest cuss on earth, and now you have a chance to redeem your reputation by telling me go. It is the meanest kind of a trick, anyway, to get a fellow into a subterranean cavern, without giving him notice that you intend to take him. Oh! Mr. Devil, *please* give me a chance to run!"

(TO BE CONTINUED.)

A Novel Bee-Hive.

Geo. H. Walker, of Mill Creek apiary, had his inventive skill put to the test a few days ago in the line of hiving bees. He had occasion to go some distance from his bee ranch to procure a fine large swarm of bees. Fitting up a hive with frames, foundation, cover, etc., for the reception of the busy pets, he embarked for the capture of his prize. He succeeded nicely in securing the bees and started in triumph on his homeward march. He had not gone far when, lo! another great cluster, suspended to the branch of a tree, greeted the victor's eyes. What to do to make sure of the second swarm, for a few moments puzzled George's brain, but finally, the happy thought struck him that he could well spare one of the two shirts from his back for such a boon; so tying the neck and sleeves of his shirt and thus converting it into a sack, he hived the bees and bore the two swarms away with joyful satisfaction to Honey Dell apiary.—*Redlands Facts.*

Strength of Bees.

A French naturalist, M. Plateau, has tested various insects to ascertain their strength, and finds that the smallest ones are often the strongest. According to his experiments, a bee can drag off thirty times as much as a horse can, according to its size. One bee dragged easily twenty others, and showed a power proportionate to a locomotive. What astounding muscular power the bee must have, when we remember that a whole swarms hangs from the limb of a tree, when but comparatively few bees touch the limb itself.

LOS ANGELES, CAL., Sept. 3, 1896.

Mr. G. W. BRODBECK,
South Los Angeles.

I have been informed of your remark against my honesty and integrity, made at the Board meeting of the Bee-keepers Exchange, namely, that I would beat said Exchange out of the money I owed them; when I have at present a charge in my favor of $200 against them; now have you any reason for the remark? Have I ever been dishonest with you? On the other hand have you been honest with me? Was not the first transaction of yours with me dishonest? and I can prove it; have I not favored your orders for less than cost, at least 40 per cent lower than list prices? What have you done for me? Now this is the way you are repaying me.

Have I not always sent my energies toward the advancement of bee-keepers interests? You know better than any other man, what have you done? only broke up the best Bee Association we ever had. Have you ever made a success in California with bees? If so I'm not aware of it.

Now because you can not run the paper, and slander people as you have done Mr. Dayton, when he does not deserve it, you are my enemy; is not such opposition as this degrading our industry.

Yours,
B. S. K. BENNETT.

Words of Our Customers.

SONORA, Aug. 5, 1896.

BENNETT BEE-HIVE CO.: Enclosed find order for one dozen untested queens. Send four now and the others I will order later on, as I have supers on some of my hives and do not wish to move them now. I received the sections, etc., on the 3rd, in good condition, and prompt.

The queens received from you some time ago are fine. I find that Italians are a great deal better in almost every way than the black bees.

My bees are doing very well and I will tell you later on how I have done this season.

Yours truly,
H. HARTRIG.

MORENO, RIVERSIDE CO., CAL.,
August 19, 1896.

BENNETT BEE-HIVE CO.

Gentlemen: Enclosed please find one dollar check on Union Bank of Redlands, for which please send one Clark's cold draught smoker. The forty cents in excess will pay postage, and exchange on the check. Send smoker just as quick as possible, as I need one badly, for some degenerate person (maybe he's a populist) without the fear of the Lord, or my shotgun, got away with mine last night.

I am yours very truly,
JOHN M. FRANCE.

LOS BANOS, Aug. 21, 1896.

BENNETT BEE-HIVE CO., Los Angeles.

Gentlemen: The Italian bees arrived this morning by express. They are fine; the queen is a fine bee, and there was plenty of fresh eggs. I shall let them get a little stronger before moving to a larger hive. They arrived in good condition and am very much pleased with them.

Yours truly,
E. L. DICKINSON.

The Queen's Arrival.

A son of the Marquis of Salisbury is much interested in bee-farming, and this very mild hobby resulted in the wildest kind of excitement in the neighborhood of Hatfield the other day. Young Cecil, finding one of his hives queenless, sent an order to Welwyn, the nearest town to Hatfield for a Carniolan queen—a famous Italian bee—and asked to be informed of the time of its arrival. The bee-dealer sent off the bee by the next train, and wired: "The queen will arrive by the 3:40 this afterdoon." When Lord Cecil reached the station to take possession of his bee, he found the place thronged. The telegraph clerk had interpreted the telegram that Her Majesty was paying a sudden visit to Hatfield, and, being unable to keep such interesting news to himself, the information spread like wildfire.

QUESTIONS AND ANSWERS.

BY B. S. K. BENNETT.

HOW TO AVOID STINGS.

How can bees be handled without the handler being stung?—A. C. R.

The most successful way is by the use of smoke. Some colonies of blacks and so-called hybrids will not mind smoke, though; so to these better be introduced an Italian queen, leather color preferred, as they seldom offer to sting after a puff of wood smoke at the right time.

On opening a hive, smoke the entrance, gently lift the cover and puff smoke *once* under it, lay the cover one side and if the bees raise their heads above the top bar give smoke *only* until they go down again; *gently* lift the frame, don't jar it or be nervous, as this attracts the bees, and don't be afraid, as fear is a stinging cause; work carefully and slowly, don't make quick motions; if the bees or a bee make a bee-line for you, give it smoke. Too much smoke will often cause severe stinging.

HANDLING BLACKS AND HYBRIDS.

Blow smoke once in the entrance, tap on the hive till you hear a roar, watch the entrance and when the guards start out smoke them back, pry the cover loose and smoke a little. Raise it and smoke again. Watch that entrance. Take off the cover, watching the top bars for bees; when they appear, give a puff of smoke and then proceed as before, but watching that entrance all the while. If they sting, don't drop the frame, but hold it with the left hand, and with the right smoke them; place the frame back, close the hive and proceed again as before. After rubbing out the stings—never pinch the sting if a part of the sting is left—get a pair of tweezers and get it out immediately. Acquire the knack of unconsciously getting your hands in contact with your clothes at the same instant the bee gets there. Throw away the hive whose frame top bars stick to the cover.

I work in the apiary under this method without a veil and never get stung in the face and seldom on the hands.

KEEPING BEES IN CONDITION.

My colonies are run out, I guess, because they make no honey. What can I do to get them in condition?—M. B. J.

Introduce a good, young queen after killing the old one; feed honey or sugar syrup, if you wish. For a feeder take a block of wood, a fruit can or tumbler, or a jar, fill with feed, place block on the opening, invert and set on the top bars of frames, then place

a top box on with the cover tight. When you kill the queen see that no moth-worms or disease are in the comb.

DETECTING MOTH-WORMS IN COMB.

This is accomplished by the thin covering over the brood, the wax having been removed by black and hybrid bees. Italians go further and take the worms out if they ever allow them to get into the comb, which is seldom in a strong colony. Now place in all empty frames full sheets of foundation or comb, place in a frame of hatching bees, if you have any, put in two frames if there is enough bees to cover them, close the hive and make it tight, with small entrance.

NO MOTHS IN BEE-HIVES

That are made right. Proper bee spaces everywhere. No space in hive where wood touches wood, with a barring of more than a quarter of an inch, and frames resting on tin rabbets; no cloths and no holes.

FINDING QUEENS.

I wish to introduce queens, but cannot find mine. How will I look for them?—Miss A. D.

Look for them. Take out the central frame, look it over, see that there is brood and eggs in it (of course the comb should be one piece, not pieces; remedy, use foundation), place this frame in an empty hive; do so with all the frames. Haven't found her? Well, look into the now empty hive; well, put a queen excluder over the entrance, lay a board in front, take each frame and brush the bees off on the board in front, place frames in old hive, now pick up the queen in front. What, still no queen? Well, then, *fertile worker*, carry hive away, place empty hive in its place, shake all bees off comb and they will fly back to old location; now introduce your queen.

FOUNDATION WORTH NOTHING.

I don't believe foundation is worth anything. What do you consider it is worth?—B. J. K. (Owns 100 stands of bees.)

Worth $1.00 a pound to bees. Cost of putting in, say 34 cents. For with it they will build combs in two days, without it, fourteen days; consequently twelve days' loss in honey gathering. Twelve days' honey lost at ½ pound per comb per day equals 6 pounds at 4 cents = 24 cents, 6 sheets to the pound. $1.34 worth a pound.

Honey Producing Made Profitable.

Reducing Cost of Production—What Capital can do—An Idiotic Statement—That Rebate.

The Bennett Bee-Hive Company retiring from Business.

BY B. S. K. BENNETT.

Profitable honey production seems to be a thing of the past, and while the versions of remedy have been many, we still hear the wailing cry echoed from coast to coast, "prices below cost of production." The prices seem impossible to raise; the less produced the lower the price. This is caused by the absence of the much despised middle man, for is he not the producer's agent to the consumer; thus when he hears "no crop" his attention is called to more profitable pursuits, therefore honey has no representative and the demand drops on account of its non-representation; thus down goes the price, for the price of honey is not governed by the law of supply and demand as much as other products, for it yet has no permanent demand. The cry has always been "bee men combine and corner and exclude the product from the market and up will go the price." This the Bee-keepers' Exchange has pledged to do, but they had not honey to do this corner act with. However, their corner plan has had its trial without the aid of the Exchange, and I ask, where is the price? For a fact it has reached its lowest mark in apicultural history, for this month we find extracted sold at 2½ cents, and good white-capped comb 5 cents. This corner or exclusion act I refer to is the dry year, which has formed a total exclusion of our product of over 500 carloads from Southern California. The corner came without the aid of the Exchange, yet I claim if this exchange was properly handled the price would undoubtedly advance, by only adding and creating a demand and encouraging and increasing it. But some say, where is the honey to work this demand? I reply that there is still a little honey which could be used as a stepping stone in creating a demand. But I advocate that an article that cannot be much improved upon will not stand a much advanced price, thus we must look further than this toward a better and quicker plan.

LOWERING THE COST OF PRODUCTION.

The bee journals are a theme in cheap production, for do they not give the advanced rapid labor and cost-saving methods? Their ads. show where to get the cheap goods, and yet they are not worth fifty cents a year. Now this paper to be made what it should be would be worth one dollar a year, thus the amount gained by the publishers is insuffi-

cient to pay for carefully constructed essays which would do all producers a world of good in lowering the cost of production. Now study and think on this unless you wish always to sell your honey below cost.

"*The production of honey can yet be reduced in cost one-half; the market can be improved by the above so as to advance prices.*" Idiotic statement, isn't it? Remember this and I will show you how. The Bennett Bee-Hive Company, the pioneer bee suppliers, are going out of business on account of the great expense of doing a small business. And as this firm was the pioneers in cheap goods to bee men this fact is deplorable, inasmuch as their doing a good business would increase competition, which would tend to get the goods still cheaper. Now that they retire, others will think that as long as this old company could not succeed, it is no use for us to try. Thus while the price of honey goes down the cost of supplies goes up. But I have thought of a way to check all this and at the same time raise the price of honey, and in this undertaking I must have the help and encouragement of all honey producers, and if I can manage thus to produce a dollar hive for fifty cents (not talking 16 to 1) and by so doing increase the demand for honey at a better price, I'm a corker, so lend me your help.

Fifty-cent hives which are now worth one dollar can be gotten by a large business as this table will show.

SMALL BUSINESS.

5,000 bee-hives at $1 each		$5,000
Interest on $2,000 capital	$200	
Rent of plant	500	
Wear of machinery	200	
Insurance	100	
Wages for four months	800	
Managers' salary	1200	
Lumber at 40c per hive	2000	
Present business		$5,000

LARGE BUSINESS.

100,000 hives at 50 cents each		$50,000
Interest on $20,000 capital	$ 4,000	
Rent of plant	600	
Wear on machinery	400	
Insurance	500	
Wages for four months	7700	
Managers' salary	1800	
Lumber for hives	35,000	
		$50,000

Actual test of three days running on a single order of 300 hives altogether.

The profit is shown to be 20 per cent on the fifty cent hive and only 10 per cent on the dollar hive. It shows that the capital is only increased ten times while the production is twenty times, that the other expenses outside of labor is only a little in advance, while the labor is nine and one-half times greater. Now on still a larger plan these hives can be made for forty cents, and that with a freight of one cent a foot on lumber. Take this freight off, which is twelve cents, and this leaves only twenty-eight cents for the cost of the one dollar dovetailed hive of today. This can be done by a large business, operated by one manager, the heavy part of the hive made and sold where the lumber grows, thus no freight. The inside accurate fine work made at one local factory, thus getting perfect work. By this method the railroad would come to time with special freight rates on the goods necessary and ship such as sections. These could be made in the eastern basswood timber belt by this same firm at a greater reduced price, and all other supplies could be made much cheaper, for under a large production the business could be managed to manufacture 1000 hives in one order, which tested cost is only ten cents each for cutting, while now the business is run in orders of fifty hives, at a manufacturing cost of sixty cents each, this fifty cents is lost, nobody makes it, for on every order the time in getting ready to do the work on a bill of hives is seven hours, or $5 for each order, while the other expenses are practically the same when we produce twenty-five hives a day in small orders, as one hundred hives a day in large orders, thus time and money is lost in a small business, the laborers' cause is ruined, poor bee man pays high prices. But the rich man's coffers still fill, for HE has no losses.

One hundred thousand hives a year looks big, but there are 642,000 hives in use in California. They last ten years or less, thus the demand for replacement alone is 64,200 hives and the increase makes a total of 100,000 a year, then there are eight states yet on the Pacific coast to be taken care of, and with the honey demand at ten pounds per capita instead of seven-tenths of a pound honey selling at six cents, the cost less than three cents, and we would make something like one million hives a year. There is no end to profitable honey production for the honey will sell, if placed before the people in correct shape, and the price is not cut among producers.

Hive-making is an important piece of work, and I will place a forfeit of $500, and lose it if I cannot manufacture a more perfect hive than is in the market anywhere. But the point is, can I intrust my business to others and make all my hives. No, I am obliged to employ unskilled labor, who cannot be expected to do good work under six months time, and in that time I shut down on account of small business and no capital. Thus every year I get new and green hands. "It takes a man years to learn to produce honey," so with a bee-hive factory with skilled help constantly employed would

come good quality, but cheap goods and this can be brought about by bee men.

Capital can do for us what we have been unable to do, namely, cheap bee hives and supplies, honey stores throughout the country, then "competition would be the life of trade." Honey would stand on a par with sugar, thus the merchants would recognize a good thing and lay in a stock, for these merchants will not be undersold even if they sell below cost (that where sugar is), and the demand for honey would keep increasing just as long as the producers' price was firm, then it would be a case of middlemen eat middlemen, but the poor producer would be poor no more. There, my saying cheap production will advance prices, for when all the bee men place all their orders with me for filling I will guarantee cheaper goods, and interest capital in starting the ball of honey, demand rolling and a-tumbling.

These contracts I wish all honey producers to sign and return to me. They will give you all a chance to get your supplies cheaper than anywhere else. Give me a chance to interest capital, give you a share in the profit, and if you all work right, talking to your neighbors getting them interested to order from us, we can, without doubt, give back a large amount, and in case the business reaches $50,000 a year, and the profits allow, we will give you back one-half the money you have paid us for goods. We are looking for a future, not the paltry money to be gained now, and we will have future if there is a bright future for apiculture. Sign these contracts any way, even though you think you can't purchase on account of distance, for the more contracts the higher the price of honey; the only binding feature of the contract is that if you do not do as you agree you lose your rebate on your orders, and I hope your honor will keep up the price of honey anyway.

Now, bee men, just every one of you sign these contacts, tear them from the JOURNAL and mail them to me, just let them come in, let no time be lost, do it now.

B. S. K. BENNETT,
365 East Second St.,
Los Angeles, Cal.

This is my last call and if this appeal to aid you and myself is not heeded, the contracts signed and returned by the date requested, I will not call again and Bennett will drop out of the field, much the same as he entered four years ago, like a comet.

This BEE JOURNAL has received the highest praise from all the other journals, yet the patronage should be twenty times greater than it is. I want no profit, no remuneration from it, only let it hold its own.

Cheap production to many seems to mean that they must get their goods near home by ordering of planing mills or buying lumber and making their supplies themselves. Of course no one can expect to make a two-story hive complete for fifty cents, and no planing mill will undertake the job at that price. When riding through Riverside county on my wheel I stopped at a planing mill for a rest and talk, and I almost got into a free fight by declaring that I, unassisted, could cut five thousand feet of lumber into hives in one day. Why says my opponent, "a man can't handle and pile five thousand feet of lumber in nine hours," showing very clearly that they knew nothing of handling lumber for hives. And while I can do this amount of work with ease, no man can be broke to do it in six months, showing very clearly why we should run all the time. Now the mills and box factories making hives, as well as the man who makes his own, are a detriment to cheap production, so we all should interest ourselves in this specialty factory who have our own industry at heart, and who you can feel sure will do their part of cheapening the cost of production to make profit.

OUR REBATE OFFER OF JULY

Is bringing in lots of friends, and the rebate orders have kept us busy. The time was up August 10th, but nearly all the rebates were filled. Numerous small orders were sent. Of the large orders here are a few:

Mr. Geo. Filton, of Newhall, gets $13.60, an order to apply when presented.

Charles Anderson, Banning, gets $5.80 back in brood foundation.

Hubbard & Newhall, Pasadena, gets $4.00 back in bee hives.

E. Woodman, Fallbrook, gets $10.60, an order to apply next year.

Mr. Woodman says in his letter in asking for rebate: "But I don't believe you will do it. I bought a bill of goods on March 17, 1896, and if I am entitled to a rebate I would be very glad to get it, for I have not made any surplus honey or increase in bees this year, but the bees are pretty well filled up around here."

B. L. Dickerson, Norwalk, $2.00 in sundry supplies.

T. O. Anderson, Rincon, gets $3.00 in sundry supplies.

L. Gansey, Santa Ana, gets $3.60 in sundry supplies.

J. M. Jones, Los Angeles, gets $16.50 in sundry supplies.

B. W. Smith, East Los Angeles, gets $9.90 in sundry supplies.

Geo. Ottis, San Francisco, gets $54.70 in sundry supplies.

And numerous others. Mr. J. Shandowney, of Fulton Wells, called but refused to take a rebate as he said the goods were good enough for the money. This is just what others claimed, and they seemed satisfied.

We are condemned for making a poor lot of hives furnished Messrs. Moore, Pond, W. J. Oates, and Starch of Riverside, Mr. Crowfoot, of Wildomar, A. M. Peters, Fallbrook and Fred Gross, Ravena. These orders we did not fill; had nothing to do with them, and can make no rebates on them. Mr. Crowfoot purchased 200 redwood hives from Los Angeles and was very much displeased with them, and we have reason to believe he thinks we lied by disclaiming the making of them. But as a matter of fact we made only one order of 100 hives of redwood for Charles Graham, of Newhall, and the lumber was so unsatisfactory we utterly refuse to make bee-hives of redwood. Only the best of solid white pine lumber will suit us, and we hope to have this lumber soon in such quantities as to always have a large, dry stock on hand to make the finest goods from.

The Entrances to Bee-Hives.

A Cheaper Entrance—More Effectual—Less Loss of Bees—Easily Closed—No Alighting Board—More Honey—Honey got into the Super Better.

BY C. W. DAYTON.

Of the entrances of the ten or fifteen-box hives I know of a few are notches in the lower edge of the front board, and five have several half-inch holes located near the center of the front board. Box hives are deemed an advantage over the straw hive and log gum or section of hollow tree, which usually occupied the weediest corner of the garden fence.

With the adoption of frame hives came the latterly extended crevice cut from the front boards. Sometimes this entrance was as wide as the brood chamber, and sometimes not more than two or three inches wide and three-eighths in depth. The inexperienced in bee-culture think that all that is necessary is for the entrance to be large enough for a single bee to pass. This would be comparable to a small door to a very large church, except that the throng passing in and out through the hive entrance is constant all the day long. Next came the simplicity form of entrance. This consisted of a V shaped notch cut in the front edge of the bottom board. By moving the hive forward and rearward upon the bottom board the entrance was enlarged or contracted. Following this came the Heddon form of bottom board. A board cleated on the under side to prevent warping, and three-eighths or one-half-inch high strips nailed about its side and rear margins upon which the hive rests. By omitting the strip from the front margin the entrance was formed extending the full width of the hive. By thus constructing the bottom board it enabled the lower story to be used interchangeably as an upper story. This is utility and simplicity indeed, but in the practice of migratory bee-keeping it is preferable to have the hives always in condition for transportation, and this necessitates fast bottom boards and a different entrance. With all of these entrances there is a forward extension of the bottom board which is not only a waste of lumber, but when the hives are on a wagon it occupies considerable valuable space. With the Heddon or Langstroth entrances contraction blocks were needed. These were liable to be lost in the grass and occupied considerable space if stored away. Enough blocks for 125 hives is enough to fill two grain sacks full. Then when the bees were moved a quantity of other sticks and nails and hammer were necessary, and what is worse than all the rest is the hammering upon the hives.

The entrance under way of description is a near resemblance to the knot hole in the hollow tree or log gum hive. If a single hole was provided it should be at least two inches in diameter; likewise a building for one thousand persons should have a door sixteen feet wide. A two-inch hole can easily be stopped by tacking a piece of shingle or shake over it. But it is aimed to avoid nails, so the alternative is found in corks. A cork for a two-inch hole is unwieldy and easily knocked out, so it is best to adopt something smaller and increase the number of holes. A two-inch hole also provides waste because the bees can only travel upon its circumference while the center is vacant. Therefore the size of hole should be selected with regard to the size of the bee. A half-inch hole will admit bees to pass, but in practice they prefer to alight some distance within the entrance, and especially delight to alight upon one another. It is softer and surer for their feet than the hard wood. The bee which is traveled over is not inconvenienced to any noticeable extent. If half-inch holes were used it would require seven or eight for an average strong colony. Scanty entrance is bad, and the bees will bite and pull at the joints of the hive and super or cover for weeks in their efforts to find another exit. Again, the small holes are too fussy for a hurried bee-keeper to operate. The size and number which I prefer is three one-inch holes located exactly in the center of the front board of the hive and about two inches apart in the horizontal direction. After a test of three years with over one hundred hives this entrance seems preferable to any other. The size is most in accordance with the notion of the bees as to what an entrance should be, and they simply throw themselves into it without any maneuvering. If it is filled with

bees the incoming bees drop right in amongst them. Less bees miss the inch holes than forward projecting alighting boards.

Many object to an entrance halfway up the front of the hives as hindering the removal of rubbish from the bottom boards. It was thought at first that it would be necessary to have the bottom boards loose in order to assist the bees to keep them clear, but though there have been none removed for two years they are now as clean as with any kind of entrance. A little shelf just beneath the auger holes has been suggested. In this case when a bee missed it would have more difficulty than ever to gain the upper side of the shelf. In fact a shelf is a real detriment, because the bees would be in fear of striking against it. The auger hole is the mark they aim for and they think as much about alighting and crawling onward to the entrance as an arrow would of alighting on a level surface, and then jumping up against the target. The disposition of the bee is identical with that of the arrow. A base runner might slide in on a level platform at a risk of getting slivers in his pants because he learns to adapt himself to varied conditions. A man alights upon his feet but a bee alights upon those feet which correspond to a man's hands. A man may jump and grasp the limb of a tree with his hands, which is the way a bee prefers to alight, but a man, when he alights from a wagon to the ground, does not land upon his hands unless there is some mistake or miscalculation. So when a bee is compelled to alight upon a level platform before entering the hive it thinks it a mistake. Often when they alight upon the alighting board not more than six inches away over an unobstructed course they will rest awhile and then take wing and alight an inch or less above the entrance on the perpendicular side of the front of the hive. It is not so with the auger holes. Man would arrange such an alighting board for the bees as he himself would desire. It is a wonder he does not correct the bees by arranging the honey cells with their mouths upward so the honey will not run out; and furnish little lanterns to assist the bees to work in their windowless hives.

Many of the bees which alight upon the level alighting board perform what the boys would term a cart-wheel hand-spring. That is, when they grasp with their forward feet their load being in the rear part of the body, its momentum whirls the bee around with its face turned away from the entrance.

The side bars of the brood frames are five-sixteenths apart and approach within five-sixteenths of the ends of the hive, so there is no more danger of mice getting in than when the ordinary entrance is used five-sixteenths of an inch deep.

An entrance high up in the hive might provide a shorter route to the sections, but this is of little or no advantage, since it is not the bees which gather the honey which store it in the combs.

As all bee-keepers know it is the disposition of bees to keep brood in the combs nearest the entrance and store the honey in the most distant part of the hive from the entrance. The reason the honey is stored far from the entrance is to get it in the most inaccessible location for robbers. The bees know that robbers will not carry away brood, yet that is not the main reason why it is located near the entrance, nor is distance the main reason the honey occupies the particular location. The brood is located near the entrance so that it will fall within the limits of the cluster of bees which bees will be in position to guard the entrance from invasion by enemies. The higher the entrance is located the greater the tendency to store the honey in the super. Two entrances, one at each end of the brood combs, increases the tendency still more, and an entrance on the sides of the brood chamber will cause the honey to be removed from the side combs and stored up-stairs. If we allow side entrances they may be closed by propolis This is because the front entrance is sufficiently large. So if the side entrances are to be preserved the front entrance should be contracted until there will be an actual need of more entrances.

Bait sections serve to start the storage of honey in the supers, but the location of the entrance exerts an influence to continue the storage in the supers instead of the sides and back part of the brood chamber.

Florence, Cal., Sept. 3, 1896

[I have often witnessed the failure of bees to gain the alighting board and its greater exertions to get up on it again. Have noticed that the bees in our glass hive, although the entrance is at the bottom, they carry dead bees up half way of the comb and then go down to the entrance. Why this is I account for the natural entrance. Dayton failed to say that the front of his hives below the entrances was, when freshly painted, sprinkled with sand, thus assisting the bees to gain a footing; also that the bees struck square in the entrance holes almost always. Dayton has no entrance alighting boards, thus he can load close on the wagon. Dayton is the only man that I know of making a good crop of honey this year, though dark. The amount is two tons.—ED.]

Remember the PACIFIC BEE JOURNAL will be published monthly after January. The year's subscription if paid now is 50 cents; if paid before July 1st, 1897, 75 cents; thereafter $1 a year. We will make this the best Bee paper in the land.

EDITORIAL COMMENT.

BY B. S. K. BENNETT

A GUARANTEE

That every dollar received will go toward the support of this paper. I charge nothing for my time, expecting my benefit from the advancement of bee-keepers interests. Those who want a new editor just speak out and we'll have one.

THE NEWS.

Without blowing, this number just beats any Eastern paper, and plenty room to improve yet; only needs to have all bee-keepers' subscribe. We've only got one-twentieth of the apiarists on our list, it is not small for all that.

THE WONDER FUTURE OF APICULTURE

All should read; to be continued in this paper monthly next year. It's a gem, and think there is just a faint shadow of the improvement in this number, and they all seem to be able to work well; what a revolution in apiculture.

STARTING AN ARGUMENT.

There are many professional bee-keepers who say they have "got there" in perfect apiculture. So for their benefit will some of my readers answer their arguments in this paper? Best articles paid for out of my own pocket. Writers are also made subscribers.

Don't see the good of foundation.

Bee papers no good, now we've "got there"; best $1.00.

Never need to look into brood boxes.

Never need to kill old queens and replace.

How can we keep down brood rearing during an honey flow? $2.00.

Never kill off drones, no help.

My bees never swarm, but die out. I buy bees all the time, best way to run an apiary.

My bees raise brood always in the top boxes. My combs are 15 years old, raise very little honey but get it all. (I won't tell how, but you bee-keepers know.) Honey eaters don't want bees to eat.

Controling prices among producers; what plan; best $3.

Changing atmospheric conditions to make heavier rains; best $5.

A cheaper and easier way of rearing queens; best $3.

Will some one tell us how to get a large force of bees of the honey-gathering age ready before the honey's ready to flow; $2.

Keeping colonies of the same strength without much manipulation.

Diseases of bees and their cure.

A good method of handling bees cheaply; will pay $2 for best article.

How much honey will an acre yield, planted to the different honey-bearing plants; $1 for best.

Best method for retailing honey; $3 for best.

Noting condition of colony by outside appearance.

Will those gentlemen that produced 1000 pounds and 1800 pounds of honey in a single season from one colony, tell us how to do it? best $5.

How much ground in the mountains do 100 colonies need? $1.

The profit in using a standard hive.

If you decide to write on any of these just drop me a card saying so.

THE EDITOR OF GLEANINGS

Expects great improvements in Bee Culture. He doubts the idea of none, and says that those who feel that they have "got there," meaning perfect, we then check progress and go backward. He believes in foundation with deep cell walls and thin base, thus partial control of swarming; also an improvement in style of brood frames and a better size hive. His writing sounds as if he had "got there" on that foundation already, but does not want to speak plain yet; probably patent holds him. Will Gleanings' editor read "The Wonder Future of Apiculture," and see the many chances for improvement. But I think all the features therein contained will be out and patented before the end of the story, and they are now working most satisfactory from my standpoint.

THE EDITOR OF THE BEE-KEEPERS REVIEW

Claims to have received several vigorous protests against the publication of the Dayton articles. Some protests go as far as to assail Dayton's character; one letter came from one of California's most prominent bee-keepers, who tries impartially to do justice to all parties. It would seem from the above, that the man who makes himself so prominent in California, by his amalgamation writings, and worthless Bee Association organizations, has found he is unable to write Dayton out of the apicultural field, and stoops to the lowness of slander to gain his ends. That man is unworthy of honest men's attention. Dayton is now trying to get the users of glucose to buy honey. One candy firm of Los Angeles uses 35,000 pounds of this stuff a month; the price of it is 2½ cents a pound. See what a market this would make for

honey; nearly 600 tons a year in Los Angeles is used in candies and crackers alone.

EDITOR MERRILL OF THE AMERICAN BEE-KEEPER

Makes the assertion in the last number that he does not spend two hours a month on his paper. That accounts for the four copied articles from the A. B. J. Don't believe I'd like as easy a time, for I think my little paper would suffer. I am now putting in about twenty hours a month free of charge, and then running behind on receipts. But the bee men will soon come to my aid, with money and brains (for I've little of either), so we may soon have a bright newsy monthly paper, and maybe a semi-monthly.

NEW BEE PAPERS

Sour brother York's mouth, for his latest in the American Bee Journal is "If people want to sink any money in publishing or subscribing for new bee papers that's *their* business, not *ours*." Why don't he shut up, then? for here he goes, "But we feel that it *is* our affair to protect subscribers, and save them throwing away their money on something to boom a private business, or to gratify a desire of publisher's egotism for notoriety"; and here he goes at this latter, by declaring that to "*hope to live*, new papers must advertise in the A. B. J." "Isn't he cute."

THROWING AWAY MONEY.

Does York have to advise thus? and don't people get value received? In his estimation he expects to lose subscribers by those new bee papers, by the bright young life they display. While 36 is a feeble age with A. B. J., white headed sure, and Gleanings getting "gray." We'll have a funeral yet.

Good thing York dropped the Atchley folks, which fact, York claimed, started the Southland Queen; the paper's a great assistance to bee-keepers of the South, for unlike the A. B. J., she's edited by able apiarists, just as ours is, and not run to boom a private business, but to help encourage bee-keepers to make honey-producing profitable by advanced labor and cost-saving methods which it brings into universal use. There, York.

The Consumption of Honey.

Destruction of honey consumption by bee men. I know of men who produce honey, rejecting it when it's placed before them at hotels and restaurants; and I have heard the proprietors state that they never use an article again that's once rejected. I know of no one to refuse honey except the bee men.

My method, whenever and wherever I eat, is to call for honey; if the proprietors know nothing about it, I tell them the value of having it, and if every bee man would do this, there surely would be more honey on tables everywhere.

HONEY AS GOOD AS SUGAR.

Do you know that honey will go as far as sugar and sweeten just as much? If you want a delicious dish, mush, honey and milk will make it; then honey in coffee and tea is just as good as sugar and more wholesome. Honey is the cheaper for preserves, and keeps better, as sugar has a certain fomentive power. Honey is also great medicine; it may seem strange to many but it is a fact, *that the consumption of honey is much less in California per capita* than elsewhere; so we need that little book, "*Honey as Food and Medicine*." They're only $2.00 per 100 copies; and with the bee-keeper's card printed on them they would be a good ad., and could you use $2.00 to more advantage? It's better that letting the commission men have it.

The Ruined Los Angeles Market.

The low prices of honey last summer caused me to look around for the cause. On finding that few Los Angeles people used our sweet, or know so little of it, I thought of a way to put it before them, increase the use and make better times for bee men, which would surely increase our business; so in July '95, we bought 150 cases of comb honey, paying the bee men 8 to 11 cents per pound, and two tons of extracted, paying 5 cents a pound; these prices were a cent above market prices; thus before the end of July the market met our prices.

The extracted was put up in pint and quart Mason jars, and sold at first at 25 and 40 cents, a big price; this was peddled by boys, from house to house; the comb sold at 12½ to 15 cents; the sales were so big that each boy often sold $12 00 worth each day; and so the trade grew and they got a regular line of customers; a wagon was called into acquisition, so we bought more honey as we were meeting with the best of success; then the store got onto the trade and bought and displayed the honey in the windows; the vegetable and fruit peddlers also carried honey; this was exactly what we wanted, to get everyone interested and we were all right as long as prices were not cut. But one morning the boys came to me and said, Mr. Bennett, we've got to reduce prices, as the bee men have "caught on," and say we're making to much off them by selling honey too high; these bee men have gone our rounds and sell at 6 cents per pound for extracted and 10 cents for comb. So we sent out a man to intercept these price-cutters and offer them their price or higher if necessary. But without much success, for they did not come near us; so the boys tried a new territory, but finally left us and bought some cheaper dark honey elsewhere; this left us

with a lot of honey which was depreciating in value which we sold at cost to get rid of; the stores were at a stand still and were reducing prices; then finally the bee men got the price down to 5 cents for extracted and 7½ for comb; this capped the climax and we all "quit", including the bee men, as they were out of honey. Thus the Los Angeles market was ruined by a few jealous bee-keepers reducing prices, while we still might all be doing a flourishing business, increasing the consumption as well as prices, and at a good profit to all interested.

Moral: Sell honey at retail prices when you retail, and wholesale prices when you wholesale.

Building a Market.

Market building can be accomplished by a strict combination of prices among producers, being sure to have the product back of it; then start sales which will encourage competition that will be for the trade, as long as prices can't be cut; this will bring down the profit of the middlemen, as there is the only chance of cutting; then when the trade is once established the price on the product can be gently raised. Sure a Spreckels monopoly.

INCREASING THE CONSUMPTION OF HONEY TO TWENTY POUNDS PER CAPITA.

Now when a combination on prices is reached we will like nothing better than to start into the selling of honey again; and if the prices are kept up, I see no reason why we can't increase the per capita of consumption of honey from its present low mark of half a pound per person a year to ten or even twenty pounds per capita a year. Why, I consume over sixty pounds of honey a year; I use it on mush, on hot cakes, on bread in place of butter, and sometimes in sweetening my coffee; and after getting used to it I like it better than sugar, as it is not a monopoly production.

Inventions in Apiculture.

There is nothing so aggravating as to have a newly invented hive or bee implement come out, that is more expensive or necessitates a change in the apiary appliances throughout; such inventions are a detriment to the welfare of profitable apiculture.

Inventions should be made in improving the hives and tools that are now in universal use, to make them more labor-saving and economical; thus we make great strides in advancements, for we can use all our old traps by adding the new and improved features.

My time, like other apiarists, is only taken up in feeding bees; the business is quiet and I have plenty of time, one would think, but just now during this lazy time I work nearly 15 hours a day. I have made several cheap but valuable improvements in the Dovetailed hive, one, a nail fastening of bottom hard to hive body which can be released in an instant; another in entrance blocks, another in a self-fastening ventilated hive cover; but chief among them is the combined queen-excluding honey board and bee escape; this escape can be opened and closed and the honey removed from the hive without the apiarist seeing a single bee, never disturbs the bees or kills a single one, and the main feature being that the cost is about one-half the price paid for the two implements. Now then, bee men, invent something along the lines thus laid down; there is yet abundant room for practical inventions.

Inventions though are not "in it," beside that story of the Wonder Future of Apiculture for the improvements therein contained are amazing, inasmuch as the stress of the tale lies in the fact of producing honey at less expense than now, without going inside of an apiary, though the bees still gather the nectar and are the honey producers. How is it done? Well, I won't try to tell, I might spoil the story; but I will say that all the inventions are working all right, and I believe will be in use in less than a year.

A Condensed Review of Bee Journals.

BY THE EDITOR.

This department we hope will meet with the approval of the many who cannot afford to take all the bee papers, but who still would like the most important work; as we read all the papers, we can give the most valuable grist of what we find.

Gleanings in Bee Culture.

Writer Skylark gives his ideas of low prices of honey, and tries to prove to Mr. Doolittle that the theory of discouraging every would-be bee-keeper will help prices. Says there are five causes apparent to him for the low price of honey:

1. The stoppage of the wheel of industry and the consequent inability of the poor man to buy any luxury.
2. The glutting of the large city markets which rule the price.
3. The perfect helplessness of large producers who are entirely at the mercy of commission men.
4. The entire lack of union or combination among bee-keepers.
5. Adulteration that has disgusted people with honey or rather with the foul imitations.

Four of these causes can be removed by union among bee-keepers. Skylark claims that the bee papers don't make new converts in bee-keeping, but the fault lies with bee-keepers.

The Elwood dequeening method for the prevention of swarming and increase of honey, is again attracting great attention, as it is very successful with two of the largest apiarists in the world. The plan is to dequeen just as the colonies get crowded and ready to swarm; the queen with two frames of brood are put in a neuclei close to the parent hive, keep the neuclei closed till next day; the colony is to be free of queen cells, and on the ninth day after the queen cells are all removed, then the bees are hopelessly queenless, but gather a great quantity of honey, as there is no young bees to feed, ten days after the old queen is re-introduced.

Bee-keeper Fred Anderson, or the Mystery of Crystal Mountain, is the title of a story written by Rambler; the plot is laid in California, the hero a bee-keeper.

Fred Anderson hears of an apiary for sale and goes up the Sacramento river on a steamboat bound for the Ghearing ranch; on the boat he got into a row with some miners because he would not drink whisky; he breaks the whisky jug and jumps into the river, and is fished out by a beautiful but crazy girl, who calls him Mr. Pickerel. Fred finally got to the Ghearing ranch only to find the apiary a cave full of bees; he counts 25 little ledge caves inside of this big cave. Fred often visits the Buell's who's place is below the Ghearing ranch, gets Mr. Buell interested in bees, which makes things lively on the place; Fred has an encounter with one Jeem Dawson, of whom he has bought some old hives which belonged to Donald McBurger, who was supposed to have met death at the hands of Jeem Dawson. Fred stayed over night at the old and deserted McBurger place, but suspecting Dawson of treachery Fred does not sleep; Dawson crosses the river and is frightened by Fred talking through an old water pipe; finally Dawson is is frightened away by a white figure which proves to be none other than Alfaretta Buell, the heroine.—*It's continued.*

SUPPLYING THE HOME MARKET.

Call on old customer; sell first and second grade goods for just what they are. In selling honey place it in an attractive style and put it in the store; give grocers and buyers hints as to keeping honey; how to handle it when candied. Label your packages neatly and sell it for just what it is, don't deceive, and a trade will always be held.

PROFIT IN BEE-KEEPING BEING FIGURED.

Clayton said that the profit per colony was only 56 cents per year, while Mr. Getaz proves by Clayton's figures that the profit was $2.28, and that counted on only seventy pounds of honey and one-half pound of wax per colony per annum.

Comb honey packages made cheap by folded sliced wooden wrappers, made to wrap up one, two or three sections. Can't stick your finger into the nice comb.

EDITOR E. R. ROOT OF "GLEANINGS"

Is at last in favor of *Apis Dorsata*, or the giant bee of India. In his own words, in reference to *Apis Dorsata*, he says: "I am willing to take back anything I said referring to the undesirability of bringing them to this country, and in view of what our correspondent has said in favor of points 1 to 5 it may be worth our while to get them here."

Here are the points:

1. A larger number of flowers visited having deep nectaries.
2. A larger area covered by its greater power of flight.
3. More wax produced.
4. Honey to come to us now going to bumble bees.
5. A greater power to take care of itself against wasps, etc.

Lately Dorsata was accused of being a great stinger, but amongst a certain class our own pet has a similar name.

The Bee-Keepers' Review.

Mr. C. P. Dadant says, Leave a large amount of honey for colony wintering, say thirty to forty pounds, and not compel them to winter on less, as they will not use more than is necessary.

"Extracted," 'Preventing Swarming by Rearing no Drones," written by J. K. Morrison, who claims no drones, no swarms, and no drones are raised in hives where the frame spacing are 1⅛ inch from center to center. Mr. Aspinwall entirely prevents the rearing of drones by using wooden combs, also has success in preventing swarming by putting wooden perforated dummys between the combs. Mr. Aspinwall's colonies were exceptionally strong since early April, still swarming was almost practically restrained, while in neighboring apiaries nearly all colonies had swarmed.

Mr. E. T. Abbott writes on the dealer's right to be, and dislikes the learnedly (?) vigorous writing about useless middlemen, the "non-producers the class who get their living without effort off of the real producer," so the thoughtful dealer stops and asks himself whether he is not a highway robber. Thus Abbott brings out the good of supply dealers and shows they are needed, for without these dealers the producer would be in a frightful plight. For these dealers bring goods in large quantities at low freights, saving the producer time and money in getting the goods; give the customer an opportunity to examine goods before purchasing and save him having on hand a lot of unsold goods to grow old. The dealer always reduces the price of goods in starting into the supply business.

The Pure Honey Bill, as passed, amounts to nothing, writes R. McKnight. This was passed by the House of Commons of Canada, and provides that "the feeding to bees of sugar, glucose or any other sweet substances other than such as bees gather from natural sources, with the intent that such substance shall be used by bees in the making of honey, or the exposing of any such substance with said intent, shall be deemed a willful adulteration of honey within the meaning of this act, and no honey made by bees in whole or in part from any such substances, and no imitation of honey, or sugar-honey so-called, or other substance for honey, shall be manufactured or produced for sale, or sold or offered for sale in Canada; provided, that this section shall not be interpreted or construed to prevent the giving of sugar in any form to bees to be consumed by them as food."

IS BEE PARALYSIS TRANSMITTED THROUGH THE QUEEN?

F. L. Thompson states that Rouchfus Bros. imported twenty queens from Italy. The next year four of these colonies had paralysis, but disappeared only to return again in clear weather. Bees and queens of these colonies were sold, but in no case did the disease break out in the new locality. The disease seems not to be transmitted through queens in strange localities.

The Bee-Keepers' Review gives a 5½ column review of the PACIFIC BEE JOURNAL. Quite flattering, you know. They also copy the editor's article on "Shipping Comb Honey Safely by Freight," and terms the advice given as most excellent.

The American Bee Journal.

Bees moving eggs. Prof. A. J. Cook is of the opinion they do not, as he could never get them to. Drones are pure from impurely mated queens. Drones are not killed but simply are driven from the hive by the bees. Bees to go with queens in shipping, writes G. M. Doolittle. Thirty days-old bees sent with queens, bring report of both bees and queen dead, or queen only alive. No better success with bees just emerging from the cells. But with best results with bees six to fifteen days old. In selecting bees take those that have flown once or more. They are small and slim. These bees are the first to thrust their heads into cells of unsealed honey when the frame they are on is removed from the hive. Their position thus helps to pick them up as the wings stand out from the body.

Painting about the flight-board and hive front prevents robbing.

Getting rid of laying workers. Dredge the colony well with flour scented with peppermint; dredge a queen with the same, and drop her in and all will be well.

The Southland Queen.

The May number is a picture gallery sure. Big hives, big honey. E. A. Morgan says 'tis a fact that location governs the size of hive. But one is as good as the other, says he; for prosperous bees plenty of honey encourages swarming. As he got a queen supposed to be a non-swarmer, but he changed locality; changed her and in forty-two days she was out with a seventeen-pound swarm. This swarm filled a ten-frame hive and eighty one-pound sections after September 2d. This was in Wisconsin.

Poison honey, Dr. W. M. still claims, does not poison bees but it does people, and the honey comes from mountain laurel. Nor is goat's milk poisonous when they feed from this plant. The doctor tried an experiment on a colored boy with laurel honey and the boy came near going over the "river Jordan."

Millions of gallons wasted, says Mr. A. M. Barfield of Texas, because there's not bees to gather, simply from the fact that men will not handle the bees. Thus too many men drones, who don't want or care for education and improvement.

John Orval says there is not honey sufficient to create a demand; the price is too low. Orval hits me for saying what I did in the last number in regard to his finding fault with our paper for not coming often enough, and says the wind-up should be thus and not as in last number:

> Let us all get in and rustle,
> And make this paper bustle,
> And we'll never call a halt
> 'Till we remedy the fault.

Say I, hurrah for the PACIFIC BEE JOURNAL and the Southland Queen!

Mr. Carpenter has just sold his crop of honey for something over $1100. He had a hundred stands of bees to start in the spring. He has now 225 stands; they have increased. He and family have done the work and raised grain, hay and fruit besides, and only hired a man to help stack hay. He had 325 cases of comb honey, the rest he extracted. The honey was all in first-class order. Great pains were taken to get it in good shape. Hard work was not spared. The buyer was so pleased that after he had the car loaded he called Mr. Carpenter to step into a store and made him a present of a fine pair of shoes. Honest work pays.—*Pasadena Star.*

NEW RACES OR SPECIES OF BEES.

Mr. W. K. Morrison wants to go to India and South America after them; tells of the hardships and great trouble experienced in traveling among semi-civilized countries.

The Price of Honey, and Finance.

Gold and Silver—The Purchasing Power of Labor.

BY A. B. MELLEN.

At the risk of stepping upon someone's pet political corn, I will proceed to discuss the prevailing low price of honey as well as other produce, as that question is attracting universal attention all over the United States at the present time, and as the producers and their friends are seeking for the remedy I will try to help them out by pointing to the evident cause ; also quoting from widely different authorities in support of my theory. While the advocates of "sound money" loudly proclaim that to remonetize silver would place the United States upon a silver basis, all the evidence goes to show that we are now and always have been on a silver basis, gold having merely been forced to a premium (Senator Sherman even, inadvertently admitted in his recent speech at Columbus, Ohio, that gold was now at a premium of 94%) and will always continue upon a silver basis as long as any considerable part of the trading nations of the world choose to base values upon silver. Therefore, when we base the price of honey upon the price of silver, we find that the price of honey has not fallen, but the price of gold has advanced, and as the price of gold is still further forced up, the price of honey as well as all other products of labor must fall.

Justice Walter Clark, in "Mexico in Midwinter," published in the *Arena*, says in regard to cotton purchased in New Orleans, for the cotton mills of Mexico: "A few years ago, when their dollar and ours were equal, they paid on an average thirteen cents in New Orleans and in the very same money, but owing to the enforced enhancement in the value of our money, by manipulated legislation, this thirteen cents, instead of being equal, as it should honestly be, to thirteen cents in our money, is only equal to about seven cents in our 'increased value' money. The direct loss to the cotton planter of the South is, therefore, $30 per bale, or $200,000,000 annual loss to the South on this one crop. The same is true of the wheat and corn of the West, and all other crops."

Again, Mr. John Shirley Ward, in the Los Angeles *Herald* says, "that in 1870 an ounce of silver costing as bullion $1.29, would purchase a bushel of wheat in India, and pay the freight to Liverpool, and the price of that wheat fixed the price of all wheat going to that market. In 1893 the ounce of silver bullion paid for the bushel of wheat laid down in Liverpool, and as the bushel only cost 70 cents in gold, this fixed the market price at 70 cents, and all American wheat had to be sold at 70 cents. The price of wheat in Liverpool regulates the price in Dakota, with the freight and insurance deducted."

That the price of honey has not advanced this season, considering the short crop, is equivalent to a fall in price, which will become very evident if a full crop is secured next season.

Now, the question arises, why does a portion of the people support the theory of a gold standard? I will quote Mr. G. M. Doolittle in *Gleanings* for August 15, p. 605, as he seems to hit the nail squarely on the head. Speaking in regard to the bee-keeper forcing up the price of honey, he says: "I have not heard of any grumbling because his honey did not buy enough wheat, corn, oats, etc.; but when we come to exchange honey for coal, fare on railroads, interest, taxes, etc., we find that it takes from three to seven times as much of our honey to secure to us the same results as it did in the seventies." The editor in the same number, p. 616, speaks of "nice Beauty of Hebron" potatoes going a begging at 20 cents a bushel in Medina, Ohio, and oats at 12 cents a bushel. I note that fancy white comb-honey is quoted in the same issue, in their nearest market, Cincinnati, at 14 @ 16 cents, wholesale, which means at least 20 cents retail, thus showing that the man producing potatoes or oats would have to give one bushel of potatoes or 1⅔ bushels of oats for one pound of comb-honey.

The purchasing power of labor or produce compared with the single item of street car fare now, and in the early seventies, is very striking to any thinking person. With what the "sound money" men please to term a 35 or 40 cent dollar at that time the fare was five cents, and now with greatly reduced operating expenses, and as Senator Sherman admits a 195 cent dollar, the fare is still five cents, and the same state of affairs exists wherever monoply has secured control. Is it any wonder that the monopolists are in favor of their kind of "sound money"? Reader, do you call it "honest money"?

That one class of people can immensely better their condition at the expense of another class without very much effort, by playing with the purchasing power of a nation's money, is very apparent by contrasting the purchasing power of our money even now, and that of China, where a common laborer receives a small brass coin worth about one-tenth of a cent for a day's labor, still he can change this again for ten lesser coins, one of which has a much greater purchasing power in China that the 100th part of a dollar has in the city of New York. The condition is nearly the same in Japan. I mention this, as the Japanese have made all arrangements to put on two lines of steamers to trade with the United States

and Mexico. They will land sixteen thousand tons of their products on this coast every thirty days, and will take away sixteen thousand tons of the products of our labor. Now the question arises, how can our merchants buy that enormous amount of our products with 100-cent dollars (gold standard) and sell it in Japan for 50-cent dollars, and pay all transportation and commission charges. They can only do it by forcing the producer to give at least three times as much as he had ought to for a dollar.

The people of the United States have awoke at last, and are canvassing the money question in all its forms, with the hopeful result that the control of our money will be taken away from the individual and the corporations, and vested in the government where it rightfully belongs, then with the *government* coinage of gold and silver, supplemented with the necessary issue of full legal tender paper money, we will have a sound, staple and non-fluctating money that can be relied upon to do business with.

Acton, California.

[The reference of Mr. Mellen to someone's political corn is "well put"; but the idea is education on this most important subject for gold men as well as silver men. What we want is the money that can't be manipulated by the few that have it, and and a money we all can use—producers as well as capitalists. The following are clippings of the best arguments of our Presidential candidates.—ED.]

The Free Coinage of Silver a Part of Wm. McKinley's Letter of Acceptance.

It is proposed by one wing of the Democratic party and its allies, the People's and silver parties, to inaugurate the free and unlimited coinage of silver by independent action on the part of the United States, at a ratio of sixteen ounces of silver to one ounce of gold. The mere declaration of this purpose is a menace to our financial and industrial interests and has already created universal alarm. It involves great peril to the credit and business of the country.

NO BENEFIT TO LABOR.

The character of the money which shall measure our values and exchanges and settle our balances with one another and with the nations of the world, is of such primary importance and so far-reaching in its consequences as to call for the most painstaking investigation.

BIMETALLISM.

Bimetallism cannot be secured by independent action on our part. It cannot be obtained by opening our mints to the unlimited coinage of the silver of the world at a ratio of sixteen ounces of silver to one ounce of gold, when the commercial ratio is more than thirty ounces of silver to one ounce of gold. Mexico and China have tried the experiment. Mexico has free coinage of silver and gold at a ratio slightly in excess of 16½ ounces of silver to one ounce of gold, when her mints are freely open to both metals at that ratio, not a single dollar in gold bullion is coined and circulated as money. Gold has been driven out of circulation in these countries and they are on a silver basis alone. Until international agreement is had, it is the plain duty of the United States to maintain the gold standard.

THE DOUBLE STANDARD.

On August 22, 1891, in a public address, I said: "If we could have an international ratio, which all the leading nations of the world would accept, and the true relation be fixed between the two metals, and all agree upon the quantity of silver which should constitute a dollar, then silver would be as free and unlimited in its privileges of coinage as gold is today.

FAVORS THE USE OF SILVER.

The Republican party has not been, and is is not now, opposed to the use of silver money, as its record abundantly shows. It has done all that could be done.

FARMERS AND LABORERS SUFFER MOST.

If there is any one thing which should be free from speculation and fluctuation it is the money of a country. It ought never to be the subject of mere partisan contention. When we part with our labor, our products or our property, we should receive in return money which is as stable and unchanging in value as the ingenuity of honest men can make it.

LOSING BOTH WAYS.

We have been sending too much money out of the country or getting too little in, or both. We have lost steadily in both directions. Our foreign trade has been diminishing and our domestic has suffered incalculable loss. Does not this suggest the cause of our present depression and indicate its remedy? Confidence in home enterprise has almost wholly disappeared. Our shops are closed or running at half time at reduced wages and small profits if not actual loss. Our men at home are idle, and while they are idle men abroad are occupied in supplying us with goods. Our unrivaled home market of the farmer has also greatly suffered because they who constitute it, the great army of wage-earners, are without the work and wages they formerly had. If they cannot earn wages they cannot buy pro-

ducts. They cannot earn if they have no employment, and when they don't earn, the farmers' home market is lessened and impaired and the loss is felt by both producer and consumer.—*Record.*

A Part of Mr. W. J. Bryan's Great Speech.

HOW THE WAGE-EARNER SUFFERS.

The wage-earners have been injured by a gold standard, and have expressed themselves upon the subject with great emphasis. In February, 1895, a petition asking for the immediate restoration of the free and unlimited coinage of gold and silver at 16 to 1 was signed by the representatives of all, or nearly all, the leading labor organizations and presented to Congress. Wage-earners know that while a gold standard raises the purchasing power of the dollar, it also makes it more difficult to obtain possession of the dollar; they know that employment is less permanent, loss of work more probable and re-employment less certain. A gold standard encourages the hoarding of money because money is rising; it also discourages enterprise and paralyzes industry. On the other hand, the restoration of bimetallism will discourage hoarding, because, when prices are steady or rising, money cannot afford to lie idle in the bank vaults. The farmers and wage-earners together constitute a considerable majority of the people of the country. Why should their interests be ignored in considering financial legislation? A monetary system which is peculiarly advantageous to a few syndicates has far less to commend it than a system which would give hope and encouragement to those who create the nation's wealth.

ARE THE GOLD MONOMETALLISTS HONEST?

There can be no sympathy or co-operation between the advocates of a universal gold standard and the advocates of bimetallism. If, on the other hand, they are bending their energies toward the permanent establishment of a gold standard under cover of a declaration in favor of international bimetallism, I am justified in suggesting that honest money cannot be expected at the hands of those who deal dishonestly with the American people.

THE REAL EFFECT OF BIMETALLISM.

We contend that free and unlimited coinage by the United States alone will raise the bullion value of silver to its coinage value, and thus make silver bullion worth $1.29 per ounce in gold throughout the world. This proposition is in keeping with natural laws, not in defiance of them. The best-known law of commerce is the law of supply and demand. We recognize this law and build our argument upon it. We apply this law to money when we say that a reduction in the volume of money will raise the purchasing power of the dollar; we also apply the law of supply and demand to silver when we say that a new demand for silver, created by law, will raise the price of silver bullion. Gold and silver are different from other commodities.

THE THEORY OF TWO KINDS OF MONEY.

If there are two kinds of money, the option must rest either with the debtor or with the creditor. Assuming that their rights are equal, we must look at the interests of society in general in order to determine to which side the option should be given. Under the bimetallic system, gold and silver are linked together by law at a fixed ratio, and any person or persons owning any quantity of either metal can have the same converted into full legal-tender money. If the creditor has the right to choose the metal in which payment shall be made, it is reasonable to suppose that he will require the debtor to pay in the dearer metal if there is any perceptible difference between the bullion values of the metals. This new demand created for the dearer metal will make that metal dearer still, while the decreased demand for the cheaper metal will make that metal cheaper still. If, on the other hand, the debtor exercises the option, it is reasonable to suppose that he will pay in the cheaper metal if one metal is perceptibly cheaper than the other; but the demand thus created for the cheaper metal will raise its price, while the lessened demand for the dearer metal will lower its price. In other words, when the creditor has the option, the metals are drawn apart; whereas, when the debtor has the option, the metals are drawn together approximately at the ratio fixed by law; provided the demand created is sufficient to absorb all of both metals presented at the mint.

WE NEED NOT WAIT FOR OTHER NATIONS.

It is also argued that, since a number of nations have demonetized silver, nothing can be done until all of those nations restore bimetallism. This is also illogical. It is immaterial how many or how few nations have open mints, provided there are sufficient open mints to furnish a monetary demand for all the gold and silver available for coinage. Prices can be lowered as effectually by decreasing the demand for an article as by increasing the supply of it, and it seems certain that the fall in the gold price of silver is due to hostile legislation and not to natural laws.

NOT THE ADVOCATES OF A FIFTY-CENT DOLLAR.

Perhaps the most persistent misrepresentation that we have to meet is the charge that we are advocating the payment of debts in fifty-cent dollars. At the present time and under present laws a silver dollar, when

melted, loses nearly half its value, but that will not be true when we again establish a mint price for silver and leave no surplus silver upon the market to drag down the price of bullion. Under bimetallism silver bullion will be worth as much as silver coin, just as gold bullion is now worth as much as gold coin, and we believe that a silver dollar will be worth as much as a gold dollar.

It is not strange that those who have made a profit by furnishing gold to the Government in the hour of its extremity, favor a financial policy which will keep the Government dependent upon them. It is folly to refuse to the people the money which they now need for fear they may hereafter have more than they need.

The farmers are opposed to the gold standard because they have felt its effects. Since they sell at wholesale and buy at retail they have lost more than they have gained by falling prices, and besides this, they have found that certain fixed charges have not fallen at all. Taxes have not been perceptibly decreased, although it requires more of farm products now than formerly to secure the money with which to pay taxes. Debts have not fallen. The farmer who owed $1,000 is still compelled to pay $1,000, althongh it may be twice as difficult as formerly to obtain the dollars with which to pay the debt. Railroad rates have not been reduced to keep pace with falling prices, and besides these items there are many more. The farmer has thus found it more and more difficult to live. Has he not a just complaint against the gold standard?

Each new convert to the gold standard will add to the general distress. So long as the scramble for gold continues, prices must fall, and a general fall in prices is but another definition of hard times.—*New York Journal.*

Questions and Answers on the Money Issue.

1. What is bimetallism?

A. The equal treatment of the two metals, gold and silver, as money, at a given ratio of coinage.

2. What is meant by 16 to 1?

That in coining the two metals into money 16 ounces of silver are to be deemed equal to one ounce of gold.

3. What has caused the divergence between the coin and bullion value of silver?

The demonetization of silver in 1873 by this country and some of the nations of Europe.

4. Why was silver demonetized?

It was demonetized because of the desire to limit the supply of money, making money dearer, thus increasing its purchasing power, and therefore to the advantage of money dealers, bondholders, creditor classes and those having fixed incomes.

5. If we had free coinage of silver would not this country become the "dumping ground" for silver from all nations?

There are, it is supposed, about four billion dollars of silver coin and bullion in the world, and if all of this should come here it would only give the United States a per capita of about $58, which is only a little more than we had of all kinds of money in the north at the close of the war when times were exceedingly prosperous. France today has nearly this amount of money per capita, and is one of the most prosperous countries in the world.

6. What is there to prevent this silver from coming to our mints for coinage?

There are three conclusive reasons: (a) Other nations have no more silver than they need; (b) Europe annually uses about twice as much silver as she produces, and (c) the great bulk of the silver now in existence already coined at ratios more favorable to silver than 16 to 1, some being 15 to 1, and some 15½ to 1.

7. Would there be vault room for the storage of so much silver?

All the silver coin and bullion in the world could be put in a room 66 feet square and 66 feet high, silver being like gold, a precious metal: all the gold coin and bullion in the world can be put in a room 22 feet square and 22 feet high, which shows how easily it may be "cornered."

8. What has the wealth of the country to do with the amount of money it posseses?

A very great deal, as a moment's reflection will show. A country like China or Japan needs but a small per capita circulation of money to make its exchanges of property, and to prevent a fall or rise in prices; and manifestly an old and well developed country of small area, like France or Germany, will need less than a new and undeveloped country of great area like the United States.

9. What effect does the increase or decrease in the volume of money have on the price of commodities?

When there is an increase in the volume of money the price of commodities rises, and when there is a decrease in the volume of money the price of commodities falls.

10. Have not the low prices of wheat and cotton been caused by the increased competition of India and other countries?

The increased production of these articles has not kept pace with the world's per capita of population, but our wheat and cotton growers are now only receiving the gold price of silver for their products, while those in silver standard countries—their main competitors—are receiving its mint or coin price for theirs. For many years the price of wheat and cotton has followed very closely the price of silver bullion. Hence every advance in the price of silver is a

benefit to our wheat and cotton growers, and this is the reason why our northern farmers and our southern planters are so universally favoring free coinage of silver.

11. Why have there been such good times in Mexico?

Because they have plenty of money and hence the price of their commodities measured in their money does not fall, nor do their taxes, debts and other fixed charges relatively rise, as these are now doing in the United States under the gold standard.

12. Why do the large city newspapers so generally oppose free silver?

Most of the large papers are run by capitalists whose selfiish interests are with the money lenders.

Notes From Marble Apiary.

Queen Rearing—Paralysis—Wired Foundation—Silver and Single Tax—Bee Escapes—Selling Honey.

BY C. W. DAYTON, FLORENCE, CAL.

QUEEN REARING.

In the season of 1894 I reared queens quite extensively by the Doolittle method, and had some difficulty, so that when some of the Eastern brethren mentioned that they had gone back to the old plan of cutting holes in a comb full of eggs or larvæ and letting the bees do their own choosing, I felt like endorsing their sentiments. After trying the old method last season and a part of this, with its attendant difficulties, I have again settled down upon the Doolittle method with a disposition to stay.

PARALYSIS.

There were about twenty cases of paralysis this season, the first appearing in January and the last in August. Nineteen were easily and surely cured by destroying the queen and introducing a new one. The twentieth case, and the one upon which no cure was attempted, came about in this wise. In July a very strong and industrious colony cast a swarm from cells reared to supersede the queen. The colony, with its own comb, was divided into seven neuclei, and each given one of the cells. All of these neuclei are today prosperous and healthy, except one, which was attacked by paralysis before the queen began to lay, and dwindled entirely away.

WIRING FOUNDATION.

My frames are wired horizontally, and the wires stretched tight like a banjo-string. In fact, to wire a frame loosely, as is recommended for the Langstroth, is only to half-wire it. I often use foundation running seven feet to the pound, and for experiment have used nine feet to the pound. Strange to say, never has a single sheet buckled. But the frames are only 13½ inches long, with four wires equidistant.

SETTING BEES ANGRY.

There has been, all summer, thirty to forty colonies sitting close to the house, six feet from the driveway and thirty feet from the highway. No trees or other landmarks to define the territory belonging to the bees, yet never has man or beast been molested. Sweaty horses have been allowed to stand for hours within six feet of the hives without molestation, often when the hives were covered with clusters of bees.

The other day was hot and sultry, and the bees seemed more quiet than ever. About ten o'clock I threw out a pail of slop in which were a quantity of fruit pealings, which had fermented. It was thrown upon the windward side of the hives, and spread over considerable space of ground. Within thirty seconds thousands of bees went on the warpath. They flew so thickly that it was thought that a dozen hives were being robbed in a wholesale way. It was necessary to stand guard over horses one hundred feet away, and under the shelter of trees. In half an hour all was quiet again. Bee-keepers, take warning what you do.

NAMELESS DISEASE.

The new nameless bee disease has been more plentiful than ever this year. In July I reared a young queen in a colony which had not had any of the disease. Just before the queen began to lay all the combs were removed but two. Then the hive was filled up again with the worst diseased comb of brood to be found in the apiary. In some of them two-thirds of the brood was rotten. The young queen filled the two healthy combs first, and seemed to have a reluctance to lay in the diseased combs. But now those diseased combs are full of hatching and larvæl brood without a trace of the disease, and still the disease is as prevalent as ever in other colonies.

SILVER AND SINGLE TAX.

I hope all bee-keepers will vote for both silver and single tax. It is easier for monopolists to make a corner on one metal than two, and we should make their road a rough one to travel.

I remember the time when I had honey to sell in Iowa, when there was a cornering of fruit jars, so that quart Mason jars were fifteen cents each. Jars might have been like gold then, but it happened their purses were not long enough to include tin plate, so we were able to crawl out of the trap by adoption of tin cans. Then, when these great ranches are divided up into small farms there will be numerous small cities and towns located over the fertile valleys, and the inhabitants will consume the honey the mountains send forth.

ESCAPES WITH HINGES AND DOORS, AND ESCAPES WITH FLEXIBLE SPRINGS—EDITORIAL IN AUGUST REVIEW.

I note that because the hinges of the Jardine bee-escape (a late invention) became clogged with propolis, some Eastern editors go clean over in favor of the Porter flexible springs.

Look here, friends. There are escapes and escapes, but the hinges are not always in the same position. The hinges and the gates of the Jardine are all entirely within the brood-chamber. That is, on the under side of the escape-board. There is no clawing, scratching and pulling there. The bees are content in the brood-chamber.

The hinges and gate to the stampede are on the upper side of the escape-board, where the bees are dispositioned to gnaw the propolis away rather than plaster it on. There are no contented bees on the super side of the escape-board, unless there is a queen or brood there also, in which case *no* escape will be of any avail.

SELLING HONEY.

In Iowa I used to peddle all my honey. Then, when my own was exhausted, I bought from my neighboring bee-keepers, and when theirs was gone I bought from abroad.

The reason peddling honey is dead in California is because it is so often that it is five to ten miles from one house to another, and on the great Miller ranch in the San Joaquin valley, there is sixty miles of such country. There is enough fertile land in this one cattle farm to make one million farms abundantly able to support a home and happy family.

How much honey ought one million average families to consume? Well, I do not know; but there is one old bachelor in East Los Angeles who has had two sixty-pound cans during the past ten months, and his last orders were to bring him fifteen pounds more.

Even when we find an inhabitant on these big farms they are not of the class to buy honey. Their diet is bacon and wheat-flour pancakes unmixed. Most of the time there are no women or children around. Their house is of rough sun-bleached boards. There is no parlor or sitting-room; no flowers in the front yard or garden in the back yard; in fact, there are no yards or fences or trees in sight, but the cattle and hogs flourish all around, and close up to their domicile, which often has no floor other than the hard-tramped earth.

Some people, by such a method of living, by selling everything they raise that there is any market price for, and feeding to the hogs what will not sell, and themselves eating what well-fed hogs would not eat, manage to pay high rents.

When a decent citizen complains of hard times, poor crops or high rents, the landed monopolist points to the above class of tenants as a fitting example to follow. They pay their rents! But how? At the expense of comfortable homes, loving companions, churches, schools, and beautifully attired villages and towns. What towns there are have two or three mammoth monopolistic stores, a blacksmith and harness-shop. The saloons are kept open all night, while on Sunday the town is groaning under the pressure of business caused by the rustily-dressed country people for many miles around, rushing in to obtain groceries and supplies on the only free day they have, because the other six, if not the whole seven, are sold to their money-grasping and grinding employer.

September 3, 1896.

Feeding Bees.

What to Feed—Cost of Feed—How I Feed—A Feeder Without Cost.

BY R. WILKIN.

This season bees demand much feeding to ensure their surviving the winter in good condition, as each hive should have twenty pounds or more honey in November to insure good results the coming season.

If the bee-keeper wishes to go out of the business and can get $2.00 for his empty hives and combs, he will perhaps save money and trouble to let them die, as in most localities here in California they do not sell for more than $3.00 in the spring. But if a man intends continuing in the business they are certainly worth double that amount in good order on the ground for work, when the stock of the country has been reduced; and we seldom have two very bad seasons in succession.

WHAT TO FEED.

About twenty-five years since, in Ohio, I fed in one season thirty one pounds of fine, what was called there coffee C sugar, which answered the purpose admirably. The question was at that time very fully discussed in *Gleanings*, of bee culture, and numerous experiments made in testing the merits of different feeds, and the general conclusion was that cane sugar syrup was as good, if not better, than honey. A. I. Root emphasized its merits. Some use a little tartaric acid in it to prevent its granulating, but I ceased using it, thinking it unnecessary. Here I use the best granulated cane sugar (other kinds will do). In feeding sugar you are sure you are not feeding foul broody honey.

COST OF FEED.

125 lbs. of choice honey at 4½ cents, without cans or cases..... $5.62

125 lbs. of syrup made with 100 lbs. of sugar and 25 pints or pounds of water, is as thick as the honey; sugar, 100 lbs., at 5 cents..... 5.00
This is what it costs me at Ventura.

The syrup is much the easiest feed in my way. It is very much less inclined to excite to robbery, which is usually *a very unsatisfactory* accompaniment of feeding, and it prevents the contagion of foul brood.

If honey and sugar, especially a cheap article of sugar like the Island sugar, mix them; they will eat the cheap sugar better with the honey in it.

HOW I FEED.

I use the simple L. L. hive. If you do not use it—well, you might as well be out of the world as out of the fashion.

I examine all my hives and record on each how much honey each has. If it has none, I place a small stone on the left edge of the cover; if crowded full, I place one on the right edge; if they have enough to keep them well, I place the stone in the middle, or half way between these two points; for any other amount of honey, I place the stone proportionately near the rich or poor points. When ready to feed, I go to all my hives that have not enough.

A FEEDER WITHOUT COST.

I raise the front end four or five inches higher than the rear and hold it there with a stone under the front end. I then make my syrup of the best cane sugar by putting 12½ gallons—about 100 pounds—of water in a tank that holds a barrel or more, under which I have a fire, and when the water boils, I dump 200 pounds of sugar into it and stir until dissolved. If this is done about noon, it will likely be cooled to blood heat (which is the right heat to feed, at it excites the bees to take hold of it vigorously at once), in time to feed in the evening. It is not safe to feed until the bees have nearly ceased flying. I can feed out the 300 pounds of syrup in one and a half hours, if I do not have to work in the dark. The 300 pounds of syrup is about the same bulk as the sugar you use. To introduce the syrup to the hives, I made me a funnel of 14 x 20 sheet of tin—that would be about 14 inches deep—the small end, instead of being made round, as is usual, I made it flat, ¼ inch thick and 4 inches wide, so that it would just go into my ⅜-inch entrance to the hive. I then bent about three inches of the lower end at right angles, or so that when the small end of the faucet was introduced into the hive, the body of it stood perpendicular. I now draw from the faucet of my tank 25 pounds of syrup into my three-gallon galvanized bucket, then with funnel and smoker in hand I proceed to my hives with the mouths turned up; blow a little smoke in at the entrance, insert my bent-up faucet and pour into it one-fourth of the contents of the bucket; in five minutes I will have four hives fed. The syrup will stand up some on the rear end of the combs, facilitating the carrying it up rapidly, also any bees that were flooded will readily float and crawl up one the combs and be licked off by the other bees. If the hives are well made and bees been in them a year or more, not likely more than one in ten will leak. If they leak, lift the hive and pour the syrup back into the bucket. They can be tested with water first, if desired. This syrup does not excite to robbery; in the morning it is all stored in the combs. I have had a strong colony store away thirty pounds in twenty-four hours.

I repeat the feeding every evening until they have all they will need until flowers come. The colonies in leaky hives I have sometimes lifted out and set in hives made honey-tight by running melted wax in the corners.

But my way of feeding colonies with leaky hives is by what is my favorite way of feeding. I stall-feed my richest and strongest colonies so as to check their breeding, by filling every available space. When full and sealed, I lift the honey from the supers and swap the combs for empty ones in the hives of those needing help. This prevents the strong colony from breeding, and does not excite the poor colony to breed unnecessarily. In the fall I do not care to breed, except very weak colonies, at the expense of artificial feed.

[Mr. Wilkin, you're a jewel. You've outlined a plan by which everyone can feed without extra cost or trouble. With loose bottoms, just get a clamp or fastening and fasten the back of bottom board to body, and I believe the propolis will keep the hive from leaking. I feed my neuclei this way, and never lose bees by drowning. The Van Dusen clamps are three cents a pair without screws, and five cents with screws. I *have* discarded feeders in preference to this plan. ED.]

Ventura, Cal., Sept. 1, 1896.

Women Make Good Apiarists.

This is an age of general activity among women. Who has not heard of the "New Woman"? In fact, much more has been heard of her of late than of the old woman. I want to remark incidentally that the old woman is not to be despised. She is fully as active as the new woman, only she does not make quite so much fuss about it. Her ways are ways of quietness. However, to the many women who must earn their bread the question naturally arises: What avenues of work are best adapted to woman's strength and natural talents? Also among those fields of industry which are best

adapted, which are the least crowded? It is well known that almost every indoor pursuit with us is overcrowded. So many people of every trade and profession flock to Southern California on account of the climate. And why, in this climate, should woman wish to confine herself to indoor employment when there are so many inviting fields of labor that may be carried on in the open air and sunshine? We all know that American women live too much indoors, and surely our climate invites emancipation in that direction. I shall endeavor to touch upon but one among the many industries in which a woman can engage for both pleasure and profit, and it is one for which she is eminently fitted.

Bee-keeping is an occupation in which women can engage successfully, as has been demonstrated by many. It is a work which requires, above all things, gentleness, patience, and close attention to detail. And it is admitted by all that women excel in these qualities. I do not claim that *all* women would make good apiarists, nor is such a result desirable in the least. But any woman who is possessed of average intelligence, strength, courage and patience, combined with thrift and some business ability, can become a successful apiarist. Gentleness in the manipulation of bees is essential to the safety of both the bees and the manipulator. Bees are frequently more quiet under the management of women than men, owing entirely to their quiet way of handling them. All the work attendant upon the management of an apiary can be done by a woman except the heavy lifting during extracting time. So it is necessary to employ very little help. To make a successful apiarist one must have a love for their work—even for the bees themselves—and one must have some little courage at first. You will be stung occasionally, of course, but after a little you will consider that a trivial matter, and be no more afraid of your bees than of your horse or your cow.

I have two neighbors, both widows, who support their families by bee-keeping, and are very successful in their management of the hives. They both thoroughly enjoy their work and are examples of health and thrift.

Many women have been successful apiarists, both in this country and Europe. Mrs. Tupper, who was among the pioneer bee-women of America, was considered authority in many matters. The Baroness Burdette-Coutts is as well known for her skill among the bees as for her many charities and her bizarre dress. To one who has a taste for such things there is a fascination in handling bees, and a wonderful field for scientific research. There are several other occupations which can be nicely combined with bee-keeping, as in this country one does not have to devote all one's time to the bees. Poultry raising and flower culture are both good adjuncts to an apiary, as there is always sufficient land for either. It may be objected that the ranches are too far removed from the cities to market cut flowers. This is often true, but I have known a neat little sum to be netted from raising some rare line of plants for the Eastern seed trade. There are many more pleasant and profitable ways of earning one's living than at the desk or in the shop.

Many men who come to Southern California for their health, engage in bee-keeping, as it takes them to the foothill region, where there is pure air, pure water and plenty of sunshine—if nothing else. Why not women in search of health also? For a fact, there is nothing more "bracing" than to open a good, full hive in extracting time. It acts as a tonic to the nerves and is an exhilarator to the spirits—also as an appetizer. It may be some occult physical force not yet understood, or it may be the mental prospect of golden honey converted into golden (or silver) dollars by the alchemy of trade—for there is mutual dependence of mind upon matter and vice versa. We have had rather a hard time of it this year, bees, bee-men and all, but so have other people, if we can believe the newspapers, and no one doubts the truth of the press. It is hard to tell whether the bees want free trade or protection, for they are rather non-committal, differing in this respect from their owners. I am assured of one thing, however, they want a ratio of sixteen to one—sixteen wet years to one dry one. This has been the dry one; but it will soon be over, and then—listen for the rain!

Apropos for a dry year, I want to tell a little story with a moral:

There was once a California pioneer, who was also a philosopher, and he used to give a little advice to the cattlemen. Of course this happened a long time ago, when California was a wilderness and dry years were plentiful. In those days there were no electric cars, no telephone, no scale bugs and no bicycles. In fact very few modern amusements, so a dry year was a very tedious affair to the cattlemen. But this philosopher advised them to never mind it at all but just to get an interesting novel and sit comfortably under the shade of a tree until it was finished—and, lo! the dry year was gone and the rains come again.

[Perhaps the novel was by James]

Do you appreciate the moral? But I am not certain that the philosopher kept cattle.

MRS. J. E. PLEASANTS.

Santiago, Sept. 4, 1896.

We intend making this the best paper published for all interested in apiculture.

APICULTURE has always been looked upon as an interesting and fascinating sudy, as well as a very profitable occupation. But a few years ago it ceased to be profitable to the great majority, for the reason of lack of combination on prices as well as the unlimited sway of the adulterator, and the feeling among producers that improvement had gotten as far as it was possible, consequently the apiarists were giving up the hope of any more profitable productions, and were actually giving utterance to the old cry of the year '65, "that bees didn't pay any more."

Basil C. Bayton was one of these apiarists; he had kept bees a number of years and hated to part with their genial company. He had often asked himself *why could not honey be taken without molesting bees?* Why could not the price of honey be advanced? Why was not the pure mating of queens successful? Why was the introduction of a queen so difficult? Why could not a queen be trapped without opening a hive and looking for her? Why was the rearing of queens so costly? Could not adulteration of honey be stopped? Why could we not tell the condition of a colony without examining it? And why was not the per capita consumption of honey forty or fifty pounds instead of only half a pound per annum? He has asked himself all these, and there they lay unanswered, so he never dreamed that one day he would find perfect answers. But living was the first consideration; so placing his 200 stands of bees on his folks' farm, which was a beautiful mountain home, situated thirty miles from Los Angeles, Basil accepted a position of traveling salesman. But after eight years of such life he returned to his almost native city of Los Angeles to investigate the changes of farming, as the farming industry was improving. While walking up one of the main streets of the city one dav, Basil noticed a show-window filled with bees; this proved to be an advertising attraction of a large honey store, which was doing a flourishing business, to judge by the great number of people it contained.

Standing looking at the bees, Basil's thoughts drifted back to the time when he had sold honey on a comparatively empty market, at an almost starving price, and to have thought of people calling and clamoring for honey would have been absurd. Although the store was well crowded, Basil managed to get in, to find a fine stock of comb and extracted honey put up in the most attractive style and the greatest variety, confectionery of the finest kinds, honey cakes, honey fruit preserves, and beeswax chewing gum. Basil finding a clerk in the back part of the store, ventures to ask a few questions. "What's the price on a 120-pound case of extracted honey?" "Ten dollars, or 8⅓ cents per pound," came the answer.

"That's a steep price. There cannot be as much produced now as when I was in the business?"

"On the contrary," remarked the clerk. "There is almost double the product over eight or nine years ago; and as you seem a novice, though once seemed to be in the business, I will say that at the present time bees are not molested in taking the honey, neither are they at other times except on loss of queen, or disease, and then this is often remedied without opening the hive, and the average product is almost double what it used to be ten years ago, and the cost of production is nearly one-half, thus a great profit."

The clerk being called away, Basil sat down on a box and was soon lost in thought. How could the honey be taken without molesting the bees? How could anyone know about the loss of queen, and the presence of disease, without looking through the hives, thus molesting the bees and remedying these without opening the hives. The clerk was still busy, and Basil decided to call when he got his wits again. But on the sidewalk he met someone he thought he

knew, and sure enough the person proved to be his old father, who was overjoyed at the meeting, and so off Basil goes for the ranch. The farm wagon contained several cases of honey, which the store folks took, paying 7 cents a pound. On nearing the father's extensive ranch of 640 acres, a great improvement was noticeable. When within a short distance of the house, Basil notices his old apiary, pretty well grown up to weeds. Getting out of the wagon, he walked through to find every hive occupied and seemingly in good condition. Arriving at the house, Basil was received by mother, sister and brothers with a good display of joy and welcome, for eight years was a long separation and the changes were noticeable, for the mother, still a good-looking woman, though quite gray, and sister Maud, a beaming girl of twenty, and the brothers good-looking young men. Basil, it could be seen, was the favorite. A man of twenty-five years, full, intelligent face, blue eyes, with light beard and mustache, a man of six feet, straight as an arrow, though a speedy bicycle rider, a good horseman, and an expert shot; always took great enjoyment in sport. Basil's time was well taken up in describing to his folks his many travels and experiences. But finally thinking of the bees, he asked for the bee books and bee journal. But there was none, and in the course of events he found that his folks, not caring much for bee-keeping, had only extracted a few times and were away behind the times; they did not visit the bee-keepers, so knew nothing of how the industry was moving forward. Basil's father, finding that his oldest boy hankered for farming, offered Basil an interest in the farm, and thus he decided to remain, and once again take up the old pastime of bee-keeping and honey-producing.

Thinking over what the honey clerk had said one day, Basil decided to visit his old friend, Prof. A. C. Comblin, whom he knew had always been the most enterprising in olden times, and thinking he could probably see these improvements there, he telephoned up to Fairview, Mr. Comblin's residence; he received a pleasant invitation to stay a few weeks at his old chum's place. So next day Basil takes his wheel and speeds to Fairview, covering the distance of 100 miles in eight hours. Arriving at the village of Fairview, he took his way up the long avenue of blue gums, which trees are in blossom and are fairly singing with bees. At the end of the avenue one comes suddenly upon the Comblin residence, a typical dwelling of California style. At the door he is met by a most beautiful young lady of about twenty summers, with a light, creamy complexion. A head of golden hair, almost covering a sweet, intellectual face, lit up by shining blue eyes, the most romantic mouth, studded with pearly white teeth.

"Mr. Bayton, I believe," she suggests.

"Yes, I'm that man," said Basil. "What a voice," thought he, "so soft and gentle." "Then this is Miss Nellie, the bee queen I've heard so much about, but never seen?"

"Yes, Mr. Bayton, that's the name I've gotten. But here is papa," and Basil is received by his old friend with seemingly the greatest relish. Then comes the introduction of Mrs. Comblin, a comely lady of middle age, and Fred, a manly youth of 22, rather tall, broad shouldered, muscular, dark hair and eyes, the picture of his mother; John, a man of 24, light complexioned, brown hair, muscular figure, much like his father, and of course the helm of the home ranch.

Supper was partaken of among much bee-talk, the whole family being bee-keepers, and a delightful time was had, though Basil, being a little fatigued after his century ride, retired early to his room, which had been made ready by the dainty hands of Miss Nellie; and so sweet were the mountain fragrant flowers in the vases in the room, capped with the pure mountain air, would, I fear, be nigh impossible to describe. Sufficient to say, Basil slept well.

On arising next morning, from the window a beautiful scene met Basil's vision. A bright June morning, with the sun just peeping over the rugged mountain peaks, and glancing its weird smiles into a marvelous pretty lake not far from the house. Around the borders of the lake were small nooks and miniature cañons, grown up with natural shrubbery and willow trees, prettier by far than any Angel City park. The land on the north side slopes gently down to the lake, and is covered by a heavy growth of alfalfa. Looking further is an apiary beautifully laid out on a southeast slope, the lines of hives perfectly straight, and showing plainly from their white and clean appearance, to the number of probably 300 colonies. At one side stood a commodious honey-house, and the whole was surrounded on three sides by a thick growth of blue-gums.

At breakfast all was merry, and a happier household was, I imagine, impossible to find. Basil referred to the apiary, and was told by Mr. Comblin that the apiary had produced last year an average of 300 pounds per colony, and there were three just such apiaries on the place that did nearly as well.

"Basil, you have been out of the business some years, where have you kept yourself?"

"I have been a commercial traveler the last eight years," Basil replies.

"Well, then, you don't know what a splendid market we now have, and that at a good price, in the face of the fact that more is produced now than formerly, and at a less cost to the producer. About seven years ago a Los Angeles gentleman hit upon a plan of

advancing prices on honey, and established, as a starter, a honey and bee show store on one of the main streets of the city, and after putting in an excellent line of goods made almost entirely of the product of the bee, advertised extensively, and soon had a large business. One month they sold 50 000 pounds of extracted and 10,000 pounds of comb honey, and that only ten months after starting. Now there are several such stores with branch houses all over the State, and they practically control the sale of honey on this coast; and when the dry year comes along, which don't come often now, the manager handles the previous crop so well that no market is ever in want. Thus, you see, there being always a supply, the demand is always on the increase, and no one hunts for a substitute. See what became of sugar. Up until about five years ago nearly everyone was using sugar, because it was very plentiful and every store-keeper was pushing it, making a leader of it, selling it for less than it cost them, for the monopoly would not reduce the prices; the store men made up their loss on other goods, such as honey. Thus, when honey was placed on the same footing, and the passage of a high tariff bill on sugar, then the sugar blight of this country causing a supply less than the consumption, and up went the price, thus the people substituted honey, and it has held its own to a very great extent ever since."

While the professor had been talking, Nellie had answered a call from the rear door, and had not yet returned. Mrs. Comblin went to the door, but seeing nothing of Nellie, had called, without receiving an answer. This was so unusual that Mr. Comblin rose to go in quest of her, but returned unsuccessful.

"She seems to have disappeared as if she had been carried off by Gypsies," remarked Basil.

Mrs. Comblin looked hard at Basil and gave utterance to a piercing scream. When quiet enough to talk, she said, "That the day before two Gypsy women had called in quest of food and alms, and had remarked on the winning beauty of Nellie. At this the professor ordered saddle horses, and Basil was invited to join in the search. Fred and John took the horses, and our hero started out on his wheel. The professor stayed to look after Mrs. Comblin, as she was quite hysterical. Fred proposed to go to town, John along the foothills to the east, and Basil took the course along a lonely, smooth road to the west. Basil's first sight of the second apiary, lying up on the right of the road, makes him slow up, and he notices that the apiary is identically like that of the first, except of a younger growth of blue-gums, the long, straight rows of hives looking the neatest he had ever seen, the ground clean and free of weeds. On coming nearer, the pipes were to be seen joining the hives together and leading to the honey-house. Each hive had a wire leading to a central post and then to the honey-house, and bewilderment was no name for Basil. How different from the ways of years ago.

At noon Basil returned to the house without any clew, Fred had got back with information of a Gypsies' encampment up in Maheau cañon; also that Joe Johnson, who had been a schoolmate of Nellie's, and was supposed to be Nellie's lover, had disappeared, and also that May Howland, a chum of Nellie's, a girl of flighty character, was away, but supposed to be visiting Nellie. Thus the mystery deepened. Mr. Comblin could not believe of Nellie's running away, as she had taken no hat or wraps, and had gone in her morning dress. But he sent word to town, dispatching a detective on Joe Johnson's track; also on May Howland's. In the afternoon the boys paid a visit to the Gypsies, but could find no trace of the missing girl, and no suspicious actions.

Next day was honey canning time, for now the tanks were quite well filled with honey. So, in the early morning, after breakfast, which was gotten up by Fred very nicely, though with a few mishaps, such as tipping over the mush, slopping the honey, burning the potatoes, spilling the pancake batter and the boiling hot coffee, we made our way to the apiary.

Now, as that location was always ahead of the others, John first opens the honey-house, quite a large building, containing hives and supplies needed in the apiary, with the necessary tools. The building is a two-story structure, the top part opening out on to the plat of land on which the apiary stands; the lower story, where the tanks are, and where the canning is done, opens out on to a roadway which leads around the lake to the house. The floor of the building is three feet above the roadway so as to facilitate the loading without lifting.

On opening the upper door John looks at what Basil afterwards learned to be the records. These are frames arranged with 300 little dials in each—there are two of them—wondered what they might be, and on looking at the tops he discovered these inscriptions: "Weight of stores in brood nest" on the one, "Condition of colonies" on the other.

Said John: "This is how we manage the bees without disturbing them. I'm not as well posted in the mechanism as father. However, I will explain the best I can."

"This record, 'Condition of Colonies,' like the other, is manipulated by wires attached to the thermometers in the brood nest of the hives; the current of an electric battery is thrown onto the wire every twenty-four hours by means of a time spring wound up every Saturday.

These dials have hands, as you see, and when they are in position they point to the right; they note four different temperatures, by pointing up, to the left, and downward. So you see we can readily pick out the position of several on the plate at a glance.

"The temperature of a colony on the point of swarming is 105 degrees; this temperature being noted by the hand of the dial pointing up. The temperature of a colony in good condition is 100 degrees, which is noted by hand of dial pointing to the right. The temperature of a queenless colony, or one that has swarmed, is 90 degrees, and is noted by hand pointing downward, while the temperature of a colony with no brood nor eggs at all is 85 degrees, and this is noted by the hand pointing to the left, while the whole does not appear to be affected by the outside temperature. But to make them sure they are only manipulated every twenty-four hours at about noon each day.

"Now notice the hands pointing downward of dials 8, 27, 81, 90, 260, 261, 275 and 290; these eight colonies need attention, and we will examine them when I take these figures down. Notice hands of dials pointing up on Nos. 30, 36, 80 and 240, ready to swarm. Before we go out," says John, "we will take the record of stores. This record is similar to the other, except that the wording is a little different and that it is governed by scales instead of temperature. It has one fault, in not being very accurate; still, it gives us a clue to work from, and a blessing it is, as it saves going through all the hives. Too much honey, the hand points up; O. K., hand points to right; light, hand points down; and very light, or no honey at all, the hand points to the left. Now for numbers. Hives Nos. 8, 81, 90, 261 and 290 are light, or short of stores; hives Nos. 94, 98, 240 and 260, too much or heavy in stores.

"Now," says John, "we will veil up and visit those hives, and put them in order, if possible." So getting his smoker ready, we make our way to hive No. 8. Of course, all this time I am anxious to know how the honey is gotten out of the hive without disturbing the bees. The hives are set on a stand 10 or 12 inches high. John kneels down on the ground and opens one side of the box, which is hinged like a door, and peered at the brood nest; then opening the back, which is also hinged like the other. The frames all swing out, for they are also hinged to this back board, this leaves the ten Langstroth frames to be examined in open air like the leaves of a book without the removal of the top box, which boxes are all piped together. Finally selecting one of the central frames, he takes it off the hooks on which it swung; sure enough there were no eggs or larvæ, nothing but pupa just hatching. This hive, of course, had no queen for about eight or nine days, or the queen had stopped laying, though we found queen cells capped, so John goes to a nuclei and getting two frames with bees and the queen between, places the frames on the hinges and closes the hive, taking the two empty frames taken from the hive, and shaking off the bees, takes them to the neuclei, as John said there were too many neuclei and he wished to do away with some. The two frames taken from the neuclei contained plenty of honey, and so made up for the shortage of honey in colony No. 8. Hives 27 and 81 were without queens, and were treated the same as No. 8, except that 81 had a frame exchanged with 94 on account of being short of stores. Then hives 90, 260, 261 and 275 had queens who were laying poorely, which were destroyed, and the colony re-queened. Hives 90 and 260 being fed from 98 and 240. Then hive No. 290 had a nameless disease, so its queen was killed and replaced. This hive was also fed by exchanging two frames with hive No. 260. Now, empty brood boxes were placed beside hives Nos. 30, 36, 40 and 240 and attached together by a swarm catcher.

This work had taken about four hours, and they were returning to the honey-house, while Basil was too full of what he had seen, and John sorrowful at the loss of his sister, that nothing was said on the way. On arriving at the honey-house John breaks the silence by saying, "When those hives get back into condition again these hands return to their correct position; so as not to be deceived by their position, we make a note of our work in this book, which has a label on it, 'Work among the colonies.'"

After this was done they go down stairs, where they find Fred busy filling the cans with honey from four large tanks, which are 6 feet high and 16 feet in diameter. "This shape ripens the honey better, as it is almost like water in coming from the hive" says John.

"John," said Basil, "how do you get this honey in the tanks? You see, our way was to take the combs from the top box, brush off the bees, and carry the combs in a wheelbarrow to the extractor in the honey-house, and when they were empty return them."

"What a job that was," chimes in Fred.

"Yes," said John, "we know very little of such work, as this way of handling bees has been in universal use for about five years. But, Mr. Bayton, you see these four large pipes emptying the nectar into these tanks. Well, the arrangement of the top boxes are such as to enable the drawing of the honey into these pipes by the force of suction pumps, when it then flows into these tanks." Basil had heard the pumps at work in coming down stairs, and now going with John behind the tanks, he saw the pumps at work. They were run by water-power.

"The machinery in the top boxes of the hives I don't understand, as pa will not explain them. They are made by a large factory in Los Angeles, and are patented."

Fred by this time had fifty cases of honey all ready for the wagon, and it being about noon, we started for the house for dinner.

At the house all seemed to have assumed their natural shape. But who was this strange person in the kitchen, who stared at Basil as if she had never seen a man, nor a kid either, for that matter. Just then Fred comes in and shouts out:

"Hello, Mary! you got back? Did you have a good vacation?"

"Don't I look as if I had got back," retorts Mary.

Turning to Basil: "This is our helper, Miss Mary Dray, who is a Tartar sometimes," said Fred.

"Well, Mary, from the way this house has acted, we don't know who comes and goes."

"What has gotten into this house since I left?" remarks Mary. "Mrs. Comblin sick, Mr. Comblin gone, Nellie gone, and from what you say I don't know whether I'm here either. Your mother seems too sick to talk, and just says, 'My poor Nellie is stolen.' The doctor says your mother must have the greatest quiet, as she is threatened with fever."

"Where has father gone?" asked John.

"Over to town to get some word from some one," replies Mary.

"Word from the detectives, probably," said Fred.

"Where is Nellie?" asked Mary. "I am dying to know; and I will die if I don't know quick."

"At first," John answers, "we thought she had been stolen by Gypsies. But now we think she eloped with Joe Johnson, or was carried off by him, or by Mary Howland."

"Don't you believe she run away with anyone," declares Mary. "She ain't that kind of a girl. Besides, she nearly hated Joe Johnson. Mr. Johnson told me two weeks ago that Nellie didn't care for him, and he was going up north somewhere, to Oakland or San Francisco, or maybe to Portland, Oregon, just to find new fields to grow on."

"Well, the detective will find him soon and clear up this mystery, or it will be the greatest mystery Fairview ever knew," declared John.

Little he knew how true his words would prove in regard to the greatest "mystery of Fairview."

"Well, dinner is ready," says Mary, "and if I hadn't come back sooner than I expected you boys would have been storming at me, I suppose. So now, eat and make up for my neglect of love."

Mary was not a bad-looking girl; on the contrary, a girl of 20 years, dark hair and eyes, and bright, intelligent face, a very good head of hair grown from a shapely head, which topped off an excellent form; and a pretty picture she made, with her white apron and white cap. Mary had been with the family for five years, and was considered as one of themselves.

Mary's words in regard to Nellie not being with Mr. Johnson set Basil to thinking, and he finally came to the conclusion that the only reasonable place for her to be was with the Gypsies. But why had they not accepted the reward and returned her? And why were they camping here so long? Turning these questions over in his mind. he could reach no better conclusion than to inspect this Gypsy camp more thoroughly. Of course this was dangerous. But having taken an extreme liking for Nellie, he decided to go alone and reconnoiter.

After dinner, saying he would ride over to town, Basil takes his wheel and starts off to search the hills around the Gypsy encampment, and finally, going into a small clearing in the forest; there, right in front of him, what do you suppose he saw? Well, two of these swarthy-complexioned Gypsy women, with Nellie between. They start into a run as soon as they notice Basil, but brave Nellie held them back and cries, "Save me, Mr. Bayton!" So Basil puts on speed and dashes straight for the women, who become frightened and run. Basil stops his wheel, catches Nellie about the waist, places her gently on the top of the handle-bars in a sitting position, then placing her arms about his neck, he mounts the wheel and finds he has perfect ease in handling the machine, for Nellie is in no way a hindrance. Then he strikes out at a fearful pace down the gently sloping hillside, when he hears a call, and looking back discovers a man mounted on a horse coming at as good a rate as the horse is capable of. Basil increases his speed and the horseman loses, who checks up and springing to the ground, brings a rifle to bear, and bang goes the peal of its blast. Basil feels a sting on the top of his head, slacks his pace and falls to the ground, where Nellie, after recovering from the fall, is standing over his now seemingly lifeless body.

* * * * * * *

Basil becomes conscious, and finds himself in an apiary. Seeing Fred, he calls; then the bees begin to sting him as he shows life. But now Basil loses consciousness again.

TO BE CONTINUED.

(Continued from page 4.)

When the bees hang out on the front of the hive in the spring it is a sign that they are building queen-cells and will soon swarm. When they get ready to swarm the second or third time we can tell by putting an ear against the hive and hearing the young queens piping. There are a few other things of less importance which may be told without opening the hive. Some bee-keepers tell when a hive is full by rapping on the cover with the knuckles, but this is not practicable where a rubber cloth is used between the cover and the frames. It is better to slip the cover forward and lift a corner of the oil cloth and look in, which may be done without smoke if done quickly. You can tell if a colony has foul brood by the odor which comes from the hive, but a bee-keeper who depends on this way of detecting it would be liable to lose his apiary. Bee paralysis is also easily told by the shiny bees that come out of the hive trembling and die in front of the hive.

Sespe, Ventura Co., Cal., Sept. 4, 1896.

[To be able to tell the condition of a colony without disturbing a hive is very much more valuable than bee-keepers imagine, for after thirty minutes time looking over one hundred colonies one can tell how his queens are working. When plenty of brood in hive, and queen laying well, a bee will come in with pollen about every five minutes. Queen not laying well, pollen carrier every twenty to thirty minutes. No pollen carriers, no brood as a rule. With a few nervous bees running about the alighting board denotes queenlessness. Honey short, or flow stopped, robbers nose about the cover and cracks of the hives as well as the poor drone being ejected from the hive. ED.]

Exhibits at Fairs—Pro and Con.

BY JOHN H. MARTIN.

CON FIRST.

It is now the season for fairs, and the bee-keeper, we will suppose, is asking himself the question, Shall I attend the fair and shall I exhibit the products of the hive? In considering the subject the following objections naturally arise:

It is too far to carry honey safely.

Arranging an exhibit is puttering work, anyway.

People will ask too many questions.

I will not sell enough honey to pay for going.

The premiums are not liberal enough.

The judge is likely to be some old snoop-endyke, who don't know a bee from a broomstick.

People will spoil my comb honey by poking parasols and canes into it.

My liquid honey will be called adulterated.

If I have bees on exhibition somebody will call them bugs.

My honey extractor will be called a churn or a washing-machine.

And I will be called a crank.

Oh, dear, I don't believe I will attend the fair.

But now let us look at the

PRO SIDE.

The man that does attend the fair and does exhibit, finds that his honey arrives safely, even from a long distance.

The so-called puttering work of arranging an exhibit calls out a talent for displaying things to the best advantage.

The questions people ask should be one of the main purposes of the exhibit, and the more questions intelligently answered the wider the dissemination of knowledge about the busy bee.

Sales of honey at the fair and the premiums are not the main objects in view. First educate, at the fair, to create a healthful inquiry, and sales will follow.

If the judge is a snoopendyke one year, make a row and have a practical bee man appointed the next year.

Never mind what people call your tools, it is because they are densely ignorant about bee-keeping, and need educating.

Never mind being called a crank. It is much better to be called a crank than a moss-back.

If all were moss-backs there would be no fairs at all.

Hurrah! then, let's attend the fair, and make a success of it.

And the pros have it.

Honey Market Reports.

The quotations in this column are based, as nearly as possible, on the grading adopted by the North American, and are the prices that the commission men get, and on which the commission for making the sales is figured. The grading rules referred to are as follows:

FANCY.—All sections to be well filled, combs straight, of even thickness, and firmly attached to all four sides, both wood and comb unsoiled by travel stain or otherwise; all the cells sealed except the row of cells next to the wood.

No. 1.—All sections well filled, but combs uneven or crooked, detached at the bottom, or with but few cells unsealed; both wood and comb unsoiled by travel stain or otherwise.

In addition to this the honey is to be classified according to color, using the terms white, amber and dark. That is, there will be "fancy white," "No. 1 dark," etc.

Dealers are expected to quote only those grades and classifications to be found in their market.

SAN FRANCISCO.—*Honey.*—Fancy white, 9@10; No. 1 white, 8@9; fancy amber, 8; No. 1 amber, 6@7; fancy dark, 5@6; No. 1 dark, 4@5; extracted, white, 4½@5; amber, 4; dark, 2½@3. Beeswax, 25@26. Honey crop light only in irrigated districts.

LOS ANGELES.—*Honey.*—Fancy white, 8@9; No. 1 white, 7@8; fancy amber, 7; fancy dark, 5@6; No. 1 dark, 4@5. Extracted, white, 3½@4; amber, 3; dark, 2. Beeswax, 20@22. Honey crop light, but no honey demand. None selling.

CINCINNATI.—*Honey.*—No. 1 white, 14@15; No. 1 amber, 12@14; No. 1 dark, 10. Extracted, amber, 5@7. Beeswax, 20@25.

KANSAS CITY.—*Honey.*—No. 1 white, 14; No. 1 amber, 12; No. 1 dark, 10. Extracted, white, 6½; amber, 5@5½; dark, 4@4½. Beeswax, 25.

CLEVELAND.—*Honey.*—Fancy white, 14@15; No. 1 white 12@13; No 1 amber, 9@10. Extracted, white, 6@7; amber, 4@5. Beeswax, 22@25. Beeswax is scarce, and would sell readily at quotations.

CHICAGO.—*Honey.*—Fancy white, 15; No. 1 white, 12@13; fancy amber, 9@10; 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@26.

PHILADELPHIA.—*Honey.*—Fancy white, 14@15; No. 1 white, 11@12; No. 1 dark, 7@8. Extracted, white clover, 9@10; amber, 4@5; dark, 3½@4. Beeswax. 25@26. Market dull on honey; beeswax in fair demand.

ST. LOUIS.—*Honey.*—Fancy white, 11@12½; No. 1 white, 10@11; fancy amber, 9@10; No. 1 amber, 8@9; fancy dark, 7½@8; No. 1 dark, 6@7½. Extracted, white, in cans, 4½@5; amber, in barrels, 3@3½. Beeswax, 25½@26. Strained and extracted honey especially slow; as a rule it goes to bakers and manufacturers. Little new honey coming in.

MINNEAPOLIS.—*Honey.*—Fancy white, 14@15; No. 1 white, 12@13; fancy amber, 10@11; No. 1 amber, 8@10; fancy dark, 6@7; No. 1 dark, 5@6. Extracted, white, 7@7½; amber, 5@5¼; dark, 4½@5. Beeswax, 22@24. Some inquiry has appeared for extracted during the last few days under unfavorable crop reports from California, but actual trading is light.

HONEY BUYERS.

LOS ANGELES, CAL.

Simpson & Hack Fruit Co., 136 S. Los Angeles st.

SAN FRANCISCO, CAL.

Henry Schacht.

CHICAGO ILL.

L. A. Lamon, 43 South Water street.
R. A. Burnett, 163 South Water street.
S. T. Fish & Co., 189 South Water street.

KANSAS CITY, MO.

C. C. Clemons, 423 Walnut street.

CINCINNATI, OHIO

Chas. F. Muth & Son.

PHILADELPHIA, PA.

Wm. A. Selser, 10 Vine street.

HAMILTON, ILL.

Chas. Dadant & Son.

BOSTON, MASS.

E. E. Blake & Co.

DENVER, COLO.

R. N. & J. C. Trisbee.

ST. LOUIS, MO.

D. G. Tutt Grocery Company.

CLEVELAND, O.

Williams Bros., 80 and 82 Broadway.

MILWAUKEE, WIS.

A. V. Bishop & Co.

ALBANY, N. Y.

Chas. McCulloch & Co.

MINNEAPOLIS, MINN.

S. H. Hall & Co.

DETROIT, MICH.

M. H. Hunt, Bell Branch, Mich.

. . . CONTRACT . . .

This Agreement Witnesseth, *That the undersigned, for and in consideration of a Rebate on orders of stock BEE-HIVES, made to and delivered by* **B. S. K. Bennett** *or assigns, does hereby agree to buy for cash, at list prices, all such goods used by the undersigned in the production of honey, to subscribe for "The Pacific Bee Journal," to make orders carefully so as not to create a loss in their filling, to promote the cause of cheaper production, to use caution in the production of a strictly pure article of honey, and to try and improve prices. In failure of these promises I hereby forfeit right and title in a rebate for that season.*

This contractor agrees to make wares of as good quality at prices as low as can be furnished by other reliable manufactories, and to use due diligence in rapid manufacture, so as to increase the profit or rebate.

This rebate made in supplies based on the volume of business, and made of the surplus profit after allowing 10 per cent interest for capital invested in the business. Thus, on receipt of every $10,000 per year, a rebate of a probable of 10 per cent to the undersigned on his orders for the year.

IN WITNESS WHEREOF, We have hereunto set our hand this ..... *day of* ..... *1896.*

Signed .....

P. O. Address .....

No. of Colonies of Bees, ...

Average Yearly Production, ...

Largest Yield per Colony, ...

Style of Hive in use, ...

Beeswax, yearly production . .....

County .....

State .....

This Contract must be returned by November 1, 1896, to gain a rebate. . . . . .

Shorty sees a deer.

Dear at the price, for—

A GREAT DEMAND FOR HONEY.

That is what I will try to create by a new and *novel method*, which I fully believe will help to get the price back to 6 cents for the extracted and 12 cents for comb in a short time, while at present the prices are down, down. Just look up the market reports. Now, bee men, I want you to help and protect me. I do not expect to receive a great benefit from this method, the *benefit will be yours directly*.

MUST HAVE HONEY

Will receive only *best quality* comb and extracted on consignment. Will guarantee to pay the *highest price*, and remit you that price, taking out *no* commission, drayage or storage charge. Will make liberal advances only when necessary. No waiting six months to realize, either. Write us a postal card, stating amount of honey on hand, and the amount of honey you expect to get in a good year. After thoroughly testing this method I will give it to the Bee-keepers to use in their towns throughout this State. Your co-worker,

B. S. K. BENNETT, Los Angeles, Cal.

REFERENCES, by permission:
Merchants National Bank
Southern California National Bank
Security Savings Bank
Dun's Mercantile Agency
Bradstreet's Mercantile Agency
Saginaw Lumber Co.

Baulding. Wood. Hamburgh. Martin Bennett.
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WE ARE SELLING OUT And offer 4-frame Cowan Honey Extractors at $22.00; 2-frame, $11.00; A. B. C. Books, $1.00; Bee Escapes, Porter, 15c.; Alley Traps, 50c.; Silk front Jail, 50c. Bee Smokers, cold blast, 50c.; hot blast, 2½ in., $1.00; 3 in., $1.25; hot blast with shield, 10c. extra; Crane Smoker, $1.50; Doolittle Wax Extractor, $2 50; large size, $4.50; 8-frame Zinc Honey Board, 11c.; 10-frame size, 13c.; Wire No. 30, tined, ¼ lb., 10c; 1 lb., 20c.; 5 lb. coil, 75c.; **Falcon Sections, $2.50**; Shipping Cases, 24 lbs., with glass, 10c.; Cogshall Brush, 15c.; Bingham Knife, 75c.; Honey Cans and Cases, 65c.; Separators, 50c. a hundred; Brood Foundation, 10 lbs., 35c.; 25 lbs., 30c.; Surplus, 10 lbs., 50c.; 25 lb., 45c. **Bee-Keepers, lay in a stock at cost.** You will never get the chance again.

Address us at **365 East Second Street, Los Angeles, Cal.**