# The Western apiarian, and ranch and range. Volume 3, No. 2 August [1890] 

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## Editorial Bee Lines.

As the season advances we learn with regret, that in a great many sections of the east the honey crop is a comparative failure.
Reports from localities in Minnesota, Wisconsin, Pennsylvania and Illa nais, lead us to believe there will be a decided shortage in the honey product this year; which following on last years poor crop, will undoubtedely have a detrimental effect on bee keeping as an industry.

An Irishman being asked how many children he had, replied:-seven, and half of them are boys. Upon being asked what the other half were,-re-plied-boys too.

## TO ADVERTISERS.

In soliciting your advertising patronage we would call your attention to the fact, that in the past we have allowed our advertising space to be used ONLY by those engaged in the Bee industry.

But now that we have added an agricuitural department, we intend increasing its advertising space, and will insert "ads." of an agricultural nature.

We would further state, that our Journal circulates among the most advanced Beekeepers, Fruit growers and Agriculturists in the country, and these are the must desirable class to be reached by those who deal in supplies.

We wish also to say, that we will admit no "ads." of a doubtful nature, nei th. $r$ have we space for Patent Medicine 'ads." Soclety Notices, or in fact any ad." that is not of direct interest to the Beekeeper or Agriculturist.

Our Journal goes into the hands of thousands of Bee men, Farmers and Fruit growers, who would be your best patrons, and who cannot be reached by any other journal.

We guarantee a circulation of at least two thousand copies per month, and as our subscription list is growing with great rapidity, we will undoubtedly be issuing five thousand copies monthly in a short time.

Under no circumstances will we allow our advertisments to encroach on our reading matter.

Now that the season of fairs is upon us we would urge upon our beekeepers the desirability of making attractive exhibits of the product of their apiaries.
We consider this one of the very best methods of bringing before the public the magnitude of the honey industry of the West, as well as fostering that most desirable object-a home market.

We doubt if there is any more attractive display at a fair than the product of a first-class apiary or one that reflects more credit and satisfaction to the exhibiter.

We should also bear in mind the fact that a good exhibition of apiarian products is an excellent advertisement for the exhibiter and places him in the foremost rank of the advanced beekeepers of the West.

## $~ \sim \sim$

General probabilities seem to point to the fact that this year will be long remembered among the fruit growers of California as the year of high prices and big returns.

There is no doubt that this year will place a good many of our fruit raisers among the moneyed men of our land. This fact in itself, though very desirable, is one of the least of the many benefits that California will reap by a large crop and Eastern scarcity, as a very large amount of money will be placed in circulation, $o$ : which the entire country will receive a direct benefit.

There can be little doubt that the fruit industry of California has before it a brilliant future.

It is estimated that there are 9,000 beekeepers in California, and there are about one hundred that correspond with the bee journals.

The probabilities are that among that 9,000 there are at least one thousand who have some new ideas of the sulbject of apiculture. Will the beekeepers make a mental note of this fact and let us hear froun them.

Will beekeepers who have received queens trom a distance during the hot weather please tell us the condition they received them in.

## 

Have any of our beekeepers ever tried heavy roofing paper on top and around the hive as a preventative to extreme heat? If so, let us know the result.

"Should bee hives be shaded from the sun?" is a subject that has been discussed both pro and con; nevertheless it is a subject worthy of more consideration than it has yet received.

Let us hear the opinion of practical men on this subject.

Far greater care is needed in the shipment of queens from the east to Caliori ia, especially during the hot season. The cages in which many eastern queen breeders send their queens are not at all adapted to such a journey.
They do not admit sufficient air, and in a great many instances the bees arrive dead.

When we stop to think that the thermometer often registers 110 degrees in the shade, and in some localities much higher; you will see that the bees are in a very different climate.

The cage should be large and airy for shipping queens to California. The

Peet cage is by far the best, but even it sometimes fails.

We had twelve queens shipped us in succession from different parts of the east, during the month of July, and all arrived dead. One was in a Peet cage, and the others in blocks with holes bored in them.

If eastern breeders wish to control Californias large trade in quecns during the summer months, they must give greater attent:o i tot he shipping cages.

In vis.ting the grocery in serch of section honey,one is otten forced to the conclusion that the beekeepers are the most careless of men, as the artucle offered over the counter is very often in any thing but a tempting condition.

And when the storekeeper informs you that he had a first class article, but it is all sold, you m.y make up your mind that the above first class article was labeled with the name of the producer, and proves the fact, that a man who has not sufficient pride in his production to brand it wit , his name; is placing on the market a very inferior article.

There are a number of practical beekeepers who are capable of writ ing excellent articles on the subject of apiculture who refuse to do so on the ground that their writing and spelling is not up to the standard. In reply to this we would say that we stand prepared to correct all errors and would be pleased to receive more communications from our readers.
There is a very small number constituting the staff of apicultural writers of the state. See if you can enlarge it by one.

We have received from Mr. J. P. Onstott of Yuba City; a box of Sfedless Raisin Grapes, of the Thompson variety.

They are certainly the finest we
have ever seen, and the raisins made from them are most excellent.
We do not,'hesitate to say that where once introduced they will be in continual demand.

## CARNIOLANS AHEAD.

## MISSOURI LETTER.

## FOR THE WESTERN APIARIAN.

## By J. B. BLACK.

© $\quad$ - $\quad$ - $\quad$
I commenced a year ago last spring with eight colonies in box hives. . I transferred to simplicity hives and requeened. Procured from Wilson of Kentucky six Italian queens and from Dr. Marrian of Pennsylvania two Carniolan queens. I increased up to twenty colonies, having four of Carniolans in the fall. They all wintered splendidly, but nearly starved after the apple bloom ceased, as our dependence is on white clover for honey, and on account of dy weather it was almost an entire failure.

My four Carniolans gave me sixty pounds of surplus honey and my Italians six. I find the Carniolans very gentle; uncommonly prolific; more industrious; and less inclined to rob. They build straighter combs and in almost every particular are superior to the Germans or Italians.
I got one swarm from my Italians and five from my Carniolans. If they have any fault more than the other races, I think it is excessive swarming and too many drones, though I have had very few drones in my apiary this summer.
I increase from one colony only one swarm; I do not work for increase, I work for honey.
As to the amount per colony, it is hard to tell just now, for I am not through robbing yet. Have taken about seven tons of honey so far. Price, about five cents, extracted.
I commenced extracting. April $24^{\text {th }}$. bees had teg in to swarm.

I divide some, and let some swarm

## Home Cirele.

THE HERMIT OF THE FOOT-HILLS.

FOUNDED ON FACT.

FOR THE WESTERN APIARIAN.
By Charles E. Upton.

## CHAPTER V.

FOR an instant we sat spellbound, listening to the wailing echoes that resounded from canyon to canyon. Then the sounds slowly died away in the distance and all was again quiet save the noise of the dripping rain without, the dreary, monotonous muttering of the wind, while far below, dull and muffled, yet perfectly distinct, came the low, threatening roar of the waters of the river.

My host was the first to break the silence.
"'Tis but a panther," said he, with a reassuring laugh: "A dangerous animal to meet in the woods at such a time as this, but one that always keeps aloof from the abodes of man."
"As I was saying," he continued, after a pause, "in company with my wife and child I embarked in a ship that was fitting out at Havre for the United States. After a long and stormy voyage we arrived at New York and I found myself in a land of strangers. Having quite a sum of money left after the paying of my travelling expenses, I purchased a large wagon and four oxen, and having provided myself with a rifle and ammunition and all the necessary provisions, turned my face westward. Months of weary journeying followed. For a time all we could see was a long, wide. limitless stretch of prairie, extending in one unbroken line from horizon to horizon. Often, worn by the never-ending toil and the same dreary monotony that every day greeted my eyes, was I tempted to turn back. But $t^{\prime} \mathrm{e}$ shining prize in that already famous country by the
far-distant Pacific urged me onward, and long as I knew the distance to be and though many were the obstacles that lay between me and the 'Land of Gold' I could not bear the thought of abandoning my purpose. Day after day dawned, and the long nights came and went, but still the prairie spread its vast fields of waving grass on every side. All day long we sped forward on our apparently endless journey, and at night, tired and travel-stained, gathered about a small fire, supplied by great labor from the scany fuel of those broad plains, and ate our evening meal. As we sat there, our faces showing dimly in the wavering light of the fire and the faint, twinkiling glimmer from the star-lit sky overhead, the high grasses surrounding our silent camp seemed to whisper mournfully as the light winds swept through, while far away, sounding loudly in the still night air we could the howling of the gaunt prairie wolves. Instinctively a feeling of loneliness would come over us, and as the fading embets of the fire were fast mingling in the general darknes; we would creep under the cover of the wagon and soon all would be forgotten in the soothing rest of sleep.
"What we had experienced so far was but the beginning of our suffering; the worst was yet to come. Late one night, while encamped on the banks of the Platte river, we were awakened by savage yells like the mingled cries of a dozen different animals, and found ourselves surrounded by a party of Sioux Indians, one of the fiercest tribes of the prairies. Knowing that resistance would only endanger the lives of my family, I did not attempt to use the rifle, but submitted quietly. Our captors bound us securely, placed us upon horses, and having taken all the portable articles to be found and destroyed what could not be moved, they started their steeds and we were swept away into the gloom of the night, leaving behind, with the exception of the stolen things, all our earthly possessions. Longingly we looked
backward through the darkness at our late abode which, lonely as it was, had been a comfort to us. But our regrets were futile, and we gave one last glance at our encampment, for we knew too well the cha1acters of our captors to expect mercy at their hands. On and on we were car ried, never pausing, never ceasing that swift pace. The grass rustled beneath, the wind whistled shrilly past as the fleet-footed steeds bore us onward. Now and then flocks of birds, startled from their nests by the noise, rose skyward with wild cries; again, the howling of wolves would burst suddenly upon our ears as the fierce animals bounded toward us; a second later their sharp yelps could be heard rods behind, rendered almost inaudible by the beating hoofs and the fast lengthening distance. Thus, minute by minute, hour by hour, did this seemingly endless race continue; still the mettled ponies exhibited no signs of weariness, but sped forward liked the winged horse in the 'Arabian Nights,' as mile after mile of the plain vanished into the blackness beyond.
"We had been moving at this rate nearly five hours when, upon turning abruptly around a clump of trees there appeared before us the glittering fires and the wigwams of an Indian camp. It was evident that our visit had been anticipated, for all was noise and confusion. The old men of the tribe, the squaws and children, were rushing towards us with their guttural jabbering, and gathering in a circle about us, were beginning to examine us with looks of ill concealed curiosity, when one of our party whom, from his dignified bearing and superior manner I took to be a chief, turned in his saddle and by a few terse words in the harsh language of his people caused them to step quickly to one side and allow us to proceed unmolested. Our captors led us to a large tent near the center of their village, placed an armed sentinel at the entrance, and we were left to await our sentence.

TO BE CONTINUED.

## PATENT MIVES.

## GENERALLY USELESS.

## For The Western Apiarian.

## By S. L. WATKINS.

© ¢ \% $\quad$ - 0
I frequently receive communications from California beekeepers and others in regard to new inventions of apiarian fixtures.

Let me state to all that nine tenths of all inventions of aprarian fixtures, that they suppose to be new, have been tried years ago.

If all new beginners would peruse the old bee books and papers well, and find out what has been invented and tried they would be a great deal better off.

Generally every new beginner must invent something in the apiarian line (at least he thinks so ) and generally commences to invent before he understands anything about bees.

All beginners should have considerable experence in be culture before they attempt to invent anything.

Patent hives seem to be all the rage and I must say there is rot a patented hive in existance today that will uqual the simplified Langstroth.

A great many beekeepers are fooling their time away trying to invent a moth trap hive, to all that are trying to do such a thing-I would say that it is a waste of time, and simply foolishness.
With Italians, Carniolans, Cyprians and Holy Land bees, you are never bothered with the moth . orms, though ociasionally in colonies of black bees will be found the silken galleries of the wax worm, but rarely if ever in in colonies of Cyprians, Italians, or Holy Land bees,

When combs of the black bee become infested with the moth worm and are taken out and plact in colonies of the above mentioned bees in a few days will be noticed the old
webs and the worms themselves scattered promiscuously about the door yard.
All the new races of bees are splended moth fighters, therefore what is the use of trying to invent; when we have bees that protect themselves from the ravages of this moth.
A great many new style frames, sections cases etc. are invented every day by beginners, but as I stated belore, nine tenths of them have been tried long ago and found useless.

If some one would irvent some style of arangement for clamping trames together securely when moving, they would conter a great boon upon beekeepers. I have long been looking tor sumething of that style, - but have never anything to suit me yet.

I advise all new beginners to have nothing to do with all these new fangled hives (these newly patented hives I mean ) because the chances are that they will have worse hives than they had before, besides the loss of their money. I would a dvise, that it they have any bees in box hives, to change them as soon as possible into movable frame hives.
I. happens occasionally t at about this time of the year, small after swarms come off, and of course without late fall pasturage the chances are that they will not pull through, and I would advise you to unite with some other swarm.

The way I accomplish uniting bees is this; I wait until sundown and then remove the comb of the swarm that I wish to put them in with, and then dump the new swarm right in with them, and give them a good smoking and by the morning they are good friends, and will repel robbers the same as if nothing had happened.

If you want to increase your bees, it wculd be a good idea to fill up your hives with foundation and feed
the bees at night, and in a short time you will have a good coloney. Some queens in the late swarms are the very best, and it pays to save them.

## rural Californian.

## Sonthern California.

## POOR HONEY CROP.

There is no room for a question that the honey crop of 1890 in Southern California is abutut all gathered, while a large yield was obtained in some localities. in others not much over half an average crop was obtained. It was supposed by most persons interested in the business of beekeeping that 1890 would give an unprecedented yield of honey, and the copious rains of the late months of 1889 , and January, February and March of 1890, gave good grounds for the supposition. But it is not rain alone that gives us flowers and nectar; a warm, damp atmosphere must surround the bloom to produce the best 'results as to secretion of nectar. Hot winds will kill the bloom on many shrubs and plants and dry up the nectar in the bloom of any tree. Even the bloom of the blue gum yields to a north wind or a hot wave from the desert. Hot or north winds have been so prevalent during the latter part of June and so far in July that in some places bees have quit storing honey and are now consuming their stores. In such places the season is ended.

My bees failed to increase but have given me 144 lbs . extracted honey per. colony. They ought to make 30 or 40 lbs . per colony yet.
J. A. Culbertson.

Keep a little beeswax tied up in a cloth to rub your flatirons with, and you will find that even a white shirt to be done up will soon becc.iie a pleasant work.

Carniolans have made a good record this season.

How to Prevent Swarming
SOME GOOD SUGGESTIONS.

For The Western ApIarian.
By WM. STYAN.

I have been asked about a dozen times this season such questions as the following: - First, how can I prevent my bees from swarming; I anc constantiy loosing them by swarms going away. Second - My bees will presist in swarming instead of mak ing lioney; what shall I do to prevent them from swarming. Third - please give plain directions for controlling the swarming of bees; etc.

Judging from these enquiries that some information on the subject is much neeeded, I will here give the latest and best known method for preventing after-swarming. It is known as the Heddon and originally appeared in the 'Bee Keepers Review'

The beekeeper who has a large number of colonies is interested in learning how to prevent or control increase. Under such conditions, surplus is more desirable than increase. By using large hives, and raising extracted honey, swarming can be practically prevented; but in the production of comb honey, swarming is the rule as soon as colonies become populous and work in the sections is well under way.

In localities not over stocked and blessed with a harvest from white clover, basswood, and fall fowers, better results are secured dy allowing one swarm from each sto $k$.
Aiter swamming can be practically prevented by the Heddon method: that of hiving the swarm upon the old stand, transfering the supers to the new hive, setting the old hive by the side of the new one for a week, then moving it to a new location.

This throws all the working force into the new hive where the sections
are, and leaves the parent colony so weak in numders, just as $t$ le young queens are hatching, that few colonies cast second swar ms.
Did the young queens always begin ha ching on the eighth day, this method would be infallible; but occasionally they hatch sooner; oftener however an after swarm is the result of their not hatching until the eleventh or twelth day when enough bees have hatched to make a small swarm. as a rule however, after-swarming is prevented by this method. E. A. Manum prevents after swarming entirely by cutting out all queen cells except one, on the fourth day, and again on the eigth day. There is two much labor about this; we would rather have an occasiona, after swarm

Mr. Manum however, does not wish to weaken the old colony, while we have no objection so long as the new swarm is correspondingly strength ened.

Certain it is that after swarming can be, and is practically prevented; but the prevention of first swarms is a more difficult problem.

## HEE CULTURE.

## For The Western Apiarian.

## By J. IRVING MARTIN

I am a boy 14 years of age and am interested in bees. I have never had any experience in bee culcure. I think that all boys should have a hobby of some kind-something that is light work and is easily understood and something that will bring a profit and encourage one to continue; and I think that bee culture is as good as any. The culture of bees is an intelligent study. I think that by starting with a couple of colonies of bees and with proper attention that in a few years they will yield quite an income. After I get started I will report my failures and successes.
Smith's Flat,
California.

## Rurai Californian.

## This Year's Money.

Of Excellent Quality.
The quality of honey produced this year in Southern California is equal to any that has been made in this locality since 1876 , both as to flavor, body and color. Much of it is bright as a ray of light seen through a dewdrop.

Spider webs ought to be brushed off bee hives to prevent the bees being caught in the webs; and an old broom is a good thing to use to do the work with; and a whitewash made of one part of Portland cement to five parts of air-slacked lime and a little salt mixed with cold water and made quite thin, is as good or better than paint for old beehives. It will fill up cracks, and kill the larva of bee moth and look as white as the best paint. It can be applied rapidly with an old broom with the handle cut off, so as not to interfere with rapid work. The drummer who wants to buy honey for three cents a pound will have to wait until next year, may be longer, before he gets much in Southern California.

The honey supply in the San Francisco market is greater than the demand; but little honey is changing hands in San Francisco on account of the large supply of berries and fruit; the yield of honey in most of the East. enn states is very smail, in some places an entire failure; several Chicago firms mix glucose and sell it as California honey, cheating their customers and giving California beekee.ers the black eye, or killing two birds with glucose; San Diego county has produced this season so far, more honey than was produced in the whole season of last year, and this year honey is of much better color and quality than that produced last year; several parties are preparing to establish large apiaries in Arizona; Carniolan bees have made a good record this year as honey gatherers.

# GENERAL REMARKS, 

## For The Western Apiarian.

## By PAT KEATING.

I live in the hills three miles west of the famous Almaden Quicksilver M nes, and like all other citizens of the United Stat ‘, am forced to submic to a peroidical vis.t from the taxcollertor.

In '88 the tax collector anived at Almaden to collect taxes, and was informed that where I lived was a settled conmunity, al d so le started or my locality.

When he reached my place he found no one at home, but was so ced to beat a hasty retreat as I had been taking honey the day betore and my bees were on the war path, and re fused to acknowledge him as the ag ent of our government.

The er 1 ctor got no ta es, tut he succeeded in coliecting three beautiful s.ings from my bees for his trouble: which I have no doubt he appreciated, for he left in a hurry, remarking that such a place as mine ought to be put in - Congress. He told my my neighbor that I kept bees to guard my place when I was away from home.

This year I met the same man on $h$ 's collecting tour a id wanted him to go out to my place, but he told me that he would not go there again if I would give him the ranch and contunts free, as he had too tender a remembrance of $h$ is last ye ars experience

We have an old fellow in this vicinity, who is rather an eccentric character in his own way. He calls himself a land guide, but the word crank would be more fitting, as he is generally engaged in the occupation of rubbing bee trees.

The bees seem to know him by intuition, as they go for him in a

* manner that causes him to expand to nearly twice his normal size. He undoubtedly would $m$ ike a good bee keeper if he would only use conm $\rightarrow n$ s nse in his treatment of them, but he seems to regard them as his natural encmy, and stands prepared to fight to the bitter end.

He succeeded in putting three of the captured hives in boxes, but the bees all died, which led him to telieve that we were too high up in the hills for the keeping of domesticated vess, but he still continues his occupation of robbing bree trees.

I have taken about : $\mathrm{x} y$ pound of honey from each hive this year, and left sufficient to supply the bees. I might also say th. t I have divided sixteen hives and have only two that lost their queens.
I make a pointofbeing particula $r$ in the examination of doubtiul hives. I found one queen'ess and gave a frame of brood, ar.d the next evening I found a lump of bees in front of the hive balled, I took her away, and upon a close inspection of the brood frame found queen cells started, and I am inclined to believe that the queen never got fertilized.
Any one that desires to divide bees must have his hive full aud honey coming in $f$ eely; for in case of a scarcity of honey I would not recommend a divi sion.

## TO ONE HEGHNER.

## FOR THE WESTERN APIARIAN.

By J. P. ISRAFL.

## CHAPTER III.

It don't make any difference what kind of bees you get to start withblack, brown, blue gray, or yellow. If you have no money, save the half of it to buy queens. Go to the hills and find bees. They are thereplenty of them. Go to your nearest
beekeeping neighbur and get him to go with you to take them on the shares. Start from his house. Borrow from him your share of the hives. He will never ask them back. You would? Well, if all my neighbors were as mean as you, $f$ would have no apiary at all. S.art from his house. You see. by starting from his house, he will have to find the team, hives, lunch, tools, and grub for the horses-in fact, all the capital. Now you are on the high road to success, and you ought to know someth n , a out he c lor of bees. A bla ck bee is black-if it is not too brown, In that case it is a "german brown bee," and has not yet been naturalized. In fact, it is the very bee-if not his brother-that Mr. Heddon and I-that is, me and Jim-used to produce our pure and unadulterated stock of hybrids, that are now celebrated all over the world-from "Dan to Beer-sheba,:" as "bees for business.' A yellow bee is an Italian, if she came from Italy and if it is not a yellow jacket. Everybody that comes from Italy is an Italian. A hybrid bee is half Italian and the other half is bee.

But to illustrate the full capability of the hybrid bee, to show you how you can form and transform him-to teach you how you can manufacture him without machinery or any capi. tal at all. I must tell you how Mr. Heddon and I-that is, me and Jimmade a fortune on them. When we go down into the cellers and vaults of our mighty intellects, we are sure to bring up something that will startle the world-revolutionize beekeeping or some gigantic scheme to put money into our already overflowing pockets. It was not Jim's fault. No! May my right hand forget her cunning, and the cash roll in promiscuously when I accuse Jim of anything like that. No! It was not Jim's fault. It was my own inordinate love of gain, my own conce...rated rascality, that done it! This was the way it came about:
It was at his palatial residence in Do-away-Jack, Mich. It was a
balmy evening in June-sweet with the breath of flowers. Nature had put on her Sunday clothes and was parading round Do-away-Jack to show them off. The linnet was twittering in the trees, and the robin was giving us his good-night song. I would like to tell you that this delightful time was lasting-that Jim had lots of it-enough to bottle up and sell at ten cents a pound! But I won't lie about it-even for Jim. The summers being only about two hours and a half long, how could it last? The "balmy fragrance" is broken off short at both ends, and you have to sniff it up at a lively rate to get your share!

I advised Jim to get a few chunks of our California climate-even offered to send him a car load free, by mail! But he declined, on the ground that climate was a hard thing to transport by rail-that it might freeze up and obstruct the track and the company sue him! Well, we were sitting there at the window-Mr. Heddon and I-that is, me and Jim-beneath the lofty dome that lifts itself by one mighty effort above the drawing room. There was silence between us for half an hour. All at once I started to my feet. I trembled in every limb! The gigantic scheme had burst upon my enraptured visioncomplete, perfect, triumphant! Then I unfolded the scheme to Jim. How we would start a new strain of bees; how we would advertise we had obtained them "by great labor and many years of careful selection." "Now ${ }^{\text {N }}$ have at home, in California, a whole apiary of hybrid bees, all ready for business-if a person runs against the business end of them," said I to Jim. "We will set your apiary to breeding hybrids in the morning. I was one time," I continued, "on a stream in Texas, where all you had to do was to throw in an empty hook and pull out ail the fish you wanted. Now amongst beekeepers there are an immense amount of 'suckers.' Now these are the men we want to catch. It will not do to call the black bee by his right name.

Call him 'the german brown bee' and we will march on to victory."
"Bravo!" cried Jim, 'I knew it was some infamous villainy, or some finacial scheme to put money into our pockets. But it will be a success. I can see the orders rolling in by the hundred. But we must stick to what you say about them being produced 'by great labor and careful selection.' Yes, my friend, we will commence in the morning." And we did.

We took the tail end of the Italian queen up to the waist and the head and body of the black-"german brown' queen and we pasted them together with surgical plaster. In four days the bees will eat away the cloth of the plaster to get the gum to make properly. The double queen by this time has grown together-is all right and ready for business. This mode of making hybrid queens -which never has been successfully practiced-except by Mr. Heddon and I-that is, me and Jim-surpasses all others that we know at the pres ent time. But it takes genius, intellectual nerve, a practical knowledge of surgery, and a steady hand. You will fail ninety-nine cases out of a hundred, and very likely the other one too. But when you do succeed you get a glorious queen. The head knows it is a black- "german brown" queen. The tail end knows that it is a pure and unadulterated Italian. So you have a queen at each endin fact, a "double ender." This mode of manufacturing queens has never been known or practiced, except by Mr. Heddon and I-that is, me and Jim-and we hereby declare ourselves to be the first true and orig inal inventors of the same.
I came home and we both pitched in to advertise the new strain of bees. I spent fourteen dollars and seventyfive cents! I got three orders, which I filled promptly, in one, two, and hree months. I got several letters in the meantime, calling me a fraud, sheat, swindler, robber, etc. But I paid no attention to these fellows-I was too busy with the bees. At last one of them wrote, demanding his
money back. Then I got mad. I answered that "nothing went back off this ranch-not if I knew it especially money! When it reached here it took a rest, or I should know the reason why! Did he want his goods shipped by mail, express, frieght, stage coach, dray, wheelbarrow, or sled? Or would he prefer to walk?" In three days I got the following letter of advice:
"J. P. Israel-You old, bald-headed, bow-legged, knock-kneed scoundrcl, thief, and robber, pack the goods on the back of a snail and send them on. Wait till I cach you!

## Z. P."

This was a base slander! I have as fine a head of hair as any other coon in San Diego county, and I am as straight as two arrows. But I couldn't bear to be called such names -I sent him the bees! Now you know, why I gave up selling this splendid strain of bees. But Jim-Jim is a better and a wiser man than I am. He can jerk the public baldheaded, with such an easy and graceful sweep of his hand, and they feel better after it. I tell you when Jim learhes out for them, they have to come. He spent hundreds of dollars advertising the new strain-"Heddon's strain'"-of hybrids, produced after long years of careful selection and great labor. The orders began to roll in. The more they rolled, the more Jim advertised. He fired the money at the printers, through the P. O. and Express, along the telegraph wires, and by private messengers. A year afterwards I turned aside off my direct route, to run up to Do-away-Jack to see my friend. There was a six-horse team in front of his magnificent residence. At a distance I thought the teamster was throwing off cord wood. But I soon discovered they were large sacks. I found that they were mail bags full of letters! Every one of them was branded "U. S. Mail-James Heddon."
"In the name of all that is astonishing," I cried, as my friend rushed into my arms, "what does this mean

You don't mean that that is all your. private mail?"
"Yes," he said chuckling, "that mail is from the 'suckers' you told me were among the beekeepers. Come in, and you shall help me open the mail."

After a supper that was fit for a king, we went to work. Mr. Heddon and I-that is, me and Jim-opened the letters, stacked the money up in front of us, marked the letters in rotation say -No. 1, $\$ 25$-put the same down in an order book, and went ahead. Five clerks figured out what each man wanted and afterwards put it down in the order book, with shipping instructions. The clerks quit at 9 o'clock, but Mr. Heddon and Ithat is, me and Jim-did not get through till 12 o'clock that night. Jin's pile of bank notes, money orders, checks, drafts, etc., was 19 inches high and mine was 17 ! Jim gathered up my pile and thrust it into my arms. "Take it, my friend," said he. "You deserve it. You can beat any man I ever knew, getting up a first-class lie or a grand humbug. - You can produce, on short notice, the most complete and artistic swindle -aye! even swindle the mother out of her first-born-her first-born female girl at sixteen years of agewithout one single compunction of conscience. You could swindle the sun out of his attractive power, and send us all off in a straight line into everlasting smash! But don't do it, my friend-don't do it, for my sake, and I will give you the half the mail brings in, every day you are here." I took his offer and stayed there two months! We divided every night. Although Mr. Heddon and I-that is, me and Jim -had the utmost confidence in each other, we each slept upon our pile of notes, till morning gave us a chance to get it into bank. I would not have stayed so long, but it was in possible to tear myself away from my friend-and the bank notes. At last it came. We fell into each other's arms and wept.
"Farewell," cried Jim, "farewell," my dearest-my most devoted humbug! You have brought me thousands, and it may be millions. Come again next season and share the spoils-profits, I mean."

Now, my dear, urisofisticated beginer, you see how Mr. Heddon and I--that is, me and Jim-made our fortunes on a crcss between the black --"german brown bee," I mean, and unadulterated It.lian. "Go thou and do likewise," but not immediately forthwith, now. I am nut done with you yet.

## 者需 To Be Continued.

## Anvicultural.

ALUMI WATERE

## A Good Insecticide.

The Boston Journal of Chemistry says that hot alum water is a recent suggestion as an insecticide. It will destroy red and black ants, cockroaches, spiders, chinch bugs and all the crawling pests which infest our houses. Take two pounds of alum and dissolve it in three quarts of boiling water; let it stand on the fire until the alum disappears; then apply it with a brush, while nearly boiling hot, to every joint and crevice in your closets, bedsteads, pantry shelves and the like. Brush the crevices in the floor of the skirting br mop boards, if you suspect that they harbor vermin. If in whitewashing a ceiling, plenty of alum is added to the lime, it will also serve to keep insects at a distance. Cockroaches will flee the paint which has been washed in cool alum water.

Alfalfa is one of the best honeyplants known.

## Strange Apricot Disease.

Recently J. P. Jones took a trip up the San Luis Rey valley. He said that last year he had noticed an apricot tree near a vineyard which seemed affected by the vine disease. He says now several trees are affected in we same way. If any orchardists i.t whe county have noticed this thing, ne wished that each would spray at least one tree with bluestone, by way of experiment, in order that it may be seen whether this spray will have any effect or not. The inspector does not think that we need to fear anything from the mysterious vine disease, but says it is barely possible that the same thing might trouble some of our trees. He found one or two vineyards in the valley troubled with colure. - [The Great Southwest.

## Rocky Mountain Red Cedar.

Professor W. F. Massey asks what is meant by Rocky mountain red cedar. It is merely a marked variety of the common red cedar Guniporus $\underset{\sim}{\text { iar }}$ finiand). That it is truly indigenous to the Rocky mountains, and of ancient sianding, appears to be evidenced by the fact that it is found along the Platte, four hundred miles eastward of the mountains, and on the banks and islands of all the streams that have their head waters in the mountains, but it is not found east of the Missouri. Under cultivation in Iowa it is a far more rapid grower than the iudigenous cedar of northeast Iowa and Wisconsin, is less subject to fungous troubles, and above all it is handsomer on account of its silvery expression at the point of growth. Some of the selected specimens are neariy as silvery in fohage as the best specimens of the silver spruce(fficea pungor: ]. As an ornamental and timber tree for the prairies it is superior to our native spec ies, or to any other variety I have met with on this continent, - [American Garden.

## Vegetable Seeds.

## Should Farmers Raise Their 0wn?

Professor Butz of the Pennsylvania Experiment Station asks, "Should fanmers raise their own vegetable seeds?" and answers the question in the negative. "The question in its scientific aspect presents itself in the following form. Are seeds which have matured under high cultivation (as on our best seed farms) better for our less euriched farm soils than seeds which matuied on this poorer soil? The answer must be found in a comparison of results regarding earliness, productiveness, vigor and quality of the products. The conditions at the station were very favorable to the work, and last year seeds were gathered from the best of those vegetables that seeded. The ground in which they grew is not a rich garden soil, but only an ordinary farm soil. These seeds were planted this year along with seeds of the same varieties from the seed houses of Landreth, Dreer, Thorburn, and others." The results are as follows, the plants tested being numerous varieties of beans, lettuce, peas, radishes, and tomatoes: "In the majority of cases the earlier mar ketable products were obtained from the purchased seeds, The greater yield, with but few exceptions, was obtained from the purchased seeds. Lettuce from purchased seeds produced heads that did not "shoot up" to flower as early as the plants from station seed. Radishes from purchased seeds were larger, more tender and more uniform than those from station seeds. On the whole, the results are strongly in favor of seeds from good soil, however rich that may be."

This is an interesting experiment, and one which needed to be made. The results are undoubtedly correct for "farmers," if that term is used in its ordinary sense, to designate those who practice a rather large and mixed husbandry. For market gardeners who grow particular crops, the results
may sometimes be different, particularly in cauliflowers, cabbages, and onions. Professor Butz has made a good point.

## Navel Oranges.

## Not Good Bearers When Old.

Orange growers in some portions of Southern California are beginning to question the supremacy which the supremacy which the Navel orange has heretofore held. As the trees grow older it is found that their bearing capacity does not increase as rapidly as does that of a good seedling or of the Mediterranean Sweet. It is true that the Navel thus far brings the highest price, but a good seedling tree will in the end bring in more money.

## ENGLISH WALNETS.

Don Bernardo Guirado, one of the most sagacious of our country merchants, owns a walnut orchard a few miles above his store at old Los Nietos, which he told us yields him a net profit of $\$ 15.000$ every year. As the orchard contains 100 acres, this is at the rate, year in and year out of \$ 150 from each acre. J. H. Burke has a 40 acre orchard near Rivera, which, although not in full bearing, last year gave him a return of \$5.960.
These figures show that the English walnut is a good tree to plant.

## Profitable Strawberries.

A farmer in Tulare county, who had grown poorer for several years on grain raising, on 160 acres, resorted to two acres of strawberries to belp him out. Those two acres enabled him to pay his most urgen tdebts, and also to plant a good orchard. The two together liberated him from grain slavery and debt. He derives an income of \$800 an acre from these strawberries.

## Southern Cultivator.

## Pet Stock for Profit.

Pet stock affords pleasure to children ( and also to parents), but when the pet stock can be made to afford profit as well as pleasure, it is an advantage. If a boy or girl is induced to take an interest in pet stock it should be with the object in view- to make it pay. There may not be any large profits derived, but even a small prospective gain induces the little one to take greater interest, as the desire to produce something and be as independant as possible, is as strong in the child as in the adult. It also induces the keeping of accounts, strict attention to bus ness, and application to all the details of management.

No child is as elated, proud and exultant as the one that has, unaided, realized a small profit from some source within its reach, and chidren should be encouragec in that direction. The most profitable pets, which afford unbounded pleasure are the Bantams, and every child should have a flock.

## ©ur Cattle Ranges.

For the western apiarian.
To get an idea of the immense welath of Caflion nia in cattle, one needs to make a trip through the mountain sections during the ranging peroid.
There you may see drove after drove of stock cattle, ranging from fifty to five hundred feeding on the mountain sides, and rapidly fattening for the winter suply. Add to this the immense dauries thit are located in the mountain districts, and then we have a fint idea $o$ the resources of the Sierras as a cattle range. After all these innumerable herds are fed, it is estimated that one half of the grasses of the mountains are allowed to go to waste for want of cattle to consume them.

## FOUL BROOD.

Some Important Questions.

For The Western Apiarian.

Please tell us something about foul brood in the Western Apiarian.

Suppose a can bursts, and the bees get at it; suppose some person buys honey, extracted from foul brood comb and feeds to bees, or they accidentally get at it. Is foul brood honey fit to eat?

Ought not the law to compel those having foul brood, to destroy the colonies as soon as discovered, and not extract from them?

There are six foul brood apiaries in the Soledad district.
I was at one apiary which had twenty out of thisty, and the extracting was done in an open house and the extracter and a lot of combs were left for the bees to clean up.

The chance is fair for foul brood to clean up the bee-business in this vicinity.

## A Subscriber

Foul brood has been discused and rediscused, and remedes in numerable have been presented, and yet no sufficient preventive or cure has been given. Sume of our leading beekeepers, such as Wm. Styan of San Mateo California, have their methods of this disease and their plans have no doubt been of great benefit to beemen generally; and yet foul brood makes great ravages and causes enormous loss.

We invite and urge every beeman who has had any experence of foul brood to send us his method of treatment, so that apiarists that are strugling with this pest, may have all possible information at their disposal.

Do not negiect or slight this; a few lines from your pen may save thousands of dollars.

Will the beekeepers that have not reported to us please do so at once and oblige?

## TME BEE-HINTER.

## A Tale of Forest ExPerences.

## For The Western Apiarian.

By GEORGE PETERS.
W E sat for an hour or two after supper "swapping yarns" and Jack gave me some of his experiences. I pressed him to tell me of some of his adventures in the far north and in compliance with my request he narrated the following
Adventure with a Polar Bear.
I do not intend to give you the events that drove me northward, for they are connected with a painful part of my history and touch smarting wounds that never have been and never will be healed; suffice it to say that late in the summer of 18 - weanother Frenchman, an Indian, and myself-were passing down the lower portion of the great Mackenzie river, but a short distance above Fort Good Hope. We purposed visiting the fort, which was owned by the Hudsor's Bay Company and replenish our supplies preparatory to taking the backward trail for Fort Garry, for the summer was drawing to a close and we had no wish to endure the rigor of a winter shut in in these far northern latitudes.

The long day had almost drawn to a close and we drew into the shore and prepared to spend the night. Our camp fires after supper were kept in full blast though wood was very scarce, the growth in these latitudes being limited to a few scraggly willows, and even these disappear within a comparatively short distance northward.

We could hear the howling of the Artic wolves, and felt that we had need of vigilance.

The grey wolf, gaunt and fierce, als, roves throughout these wastes of ciesolation, and is one of the most savage beasts on all this contine, $t$.

The night was the coldest we had lelt, and we knew that ice was beirg
formed. A single night in these regions will sometimes serve to block the rivers against canoe travel.

About midnight I took my turn ai ratch, and the Indian whom I had relieved was soon sleeping sound'y, wrapped in his blanket.

Once or twice I fancied I heard a noise down the stream, some distance below the canoe, but as I could make nothing definite out of it and was not able to rightly locate it, I did not at once investigate.
I was fully aroused, however, a few minutes later, by a heavy splash in the water a few hundred yards lower down, and being fearful for the safety of the canoe that contained all our supplies, I determined to investigate.

Without rousing my companions, I left the circle of our firelight, and went down to the edge of the water. A large $\log$ of driftwood that had floated from far up the river where the forest growth is enormous, had lodged with one end on the shore and the other jutting out into the river a distance of fifty or sixty feet. To this $\log$ we had fastened our canoe, and I walked out on the log to see that all was right.

I found the canoe just as we had left it, and was laughing at myself for what I deemed my needless fears.

I turned to retrace my steps. along the $\log$ to the shore; but had only taken a few steps when I saw, emerging from the water and climbing onto the $\log$ between me and the shore, a large animal that I instinctively recognized as a white polar bear.

To Be Continued.

We are sometimes asked the question, why we do not publish a honey market in the colums of this Journal. The reason is, that the price of honey varys to such an extent in differunt locaities, that prices which would be applicable in one locality, would nct apply in another, and in fact the price of honey is dependant to a large extent to the manner in wnich it is placed on the market.

## FOUL BROOD.

Its Cause and Cure.

Foul brood is a disease that is caused by the fottung of uncared-for brood. It usually originates in spring, in weak colonies that have $\mathrm{s}_{\mathrm{t}}$ ring-dwindled so badly that they have not bees enough left to cover or care for all the brood, and if the spring keeps raw and backward the bees willcrowd together to keep each other warm, leaving the uncared-for brood to die and rot in the cells. The brood covered by the bees in time hatches, which so increases the force of the colony that a wider circle of $a \mathrm{mb}$ is covered by the bees, taking in the space occupied by the decaying brcod.

Foul brood will almost be a thing of the fast when evely beekeefer knows the real cause of it, looks well after his bees in the spring, and sees that the brood is well cared for in every hive; and those that are not real strong must be crowded up on a few combs by using division boards. The young bee destroyed by foul brood first turns yellow; as it decays further it becomes brown, rotten, ropy matter, and many of the capped cells will be sunken a little in the capping, with a small hole in each. The disease is spread by the bees robbing foul brood colonies, and they carry the disease just in proportion to the amount of diseased honey they convey to their own hives.

In the honey season, when the bees are gathering honey freely, remove the combs and shake the bees into their own hives in the evening, give them comb foundation starters and let them build comb for four days. Then in the evening of the fourth day remove the comb and give them foundation to work out, and the cure will be complete. Fill an empty two-story hive with the combs of foul brood that have been removed from two or more diseased colonies; close them up for two days; after that open the entrance and when most of the sound brood is hatched remove those combs and give the bees starters of four dation in single hive and let them build comb for four days. In the evening of the fourth day take out these new combs and give them foun. datioh to work out.
Let it be remembered that all of those operations should be performed in the honey season and done in the evenings, so that bees will be come settled down nicely before morning. Before extracting from the diseased combs, all the combs that were not sealed must be cut out of the frames or some of the decayed brood thrown out with the honey. Then, after cut-
ting out the unsealed comb, uncap the sealed honey, extract it , and bring to a boil. $\mathrm{Al}_{l}$ the foul combs and the new combs that were built in the foul days must be made into wax, aud the dross from the wax extractor must be buried, because what runs out with the wax would not be heated enough to kill the spores; and if it was thrown out where the bees could get at it, it would start the disease again.
-From Ont. Gov't. Bulletin.

## "Guess So P1an."

By BART BAKER.
One other bee-keeper and myself are the only ones in this immediate local. ity, that keep bees with any system. I can only afford one bee journal. My neighbor, who is worth $\$ 30,000$ can't even afford a price list, but gets his apicultural education second hand from me, which seems a little stránge for a man of his stamps. There are more bees kept around here, but all on the "guess so" plan, a curse to the owners and a detriment to the rest of us who do things somewhere near right. Some of my neighbors have Kings, others have Dukes to rule the colony. One man has a hive that has bees three years old, so he tells me; I for one, will allow him to enjoy his wisdom.

## IOWA LETTTER.

## By S. S. BUCKMASIER.

I have been keeping bees by spells since 1856 . I sold my apiary all to one man in 187 I . I commenc.d beekeepıng again, Feb. 1887 I commenced with two swarms in box gums. That year was a very dry year and in 1888 my two swarms increased by natural swarming to twelve; last year was a very good year and I got eight hund ed pounds of comb honey.

I had one sash hive of bees that turned off four swarms by natural swarming, and ninety lbs. c cmb honey.
The last two winters have been very mild ones, and I think next winter will be a severe one, and the bees will "be in a very bad shape to stand it.

## BOUND TO WIN.

By ARTHUR F. BROWN.

I always like to see the dark, as well as the bright side in a journal This poor season, only encourages me the more in preparing more thoroughly fur another season. I am at work now getting out and putting up hives for another seasons use, and am also starting two out apiaries, and shall buy all all the bees I can between now and next spring, for I know there is rich harvest for those who will stick to it through thick and thin e ar y and late.
I realy think this season is a blessing to me, for it it is gett ing a number of the small (would be) beekeepers out of the busi ness. When it comes to paying $\$ 1.00$ a colony for feed 0 carry them over untill another searon they shake their heads and say "it will not pay; there is nothing in beekeeping. '"These are the ones that claim to know the whole business.

This will be the last number of the Western Apiarian, publisoed in Plácerville. Our business demands a more central location, and we have decided to remove to San Francisco, and establish a depot where the western beeman can get any thing he can possibly need to assist him in his work in the apiary.

Address all communications for the Western Apiarian to Placerville for the next month, after that to SanFrancisco. It is your turn to write for the next issue, and we await your communication. Please do not disappoint us.

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These Grapes make the finest seedless raisins known.
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## TO BEE-KEEPERS.

We are desirous of securing reliable statistics of all the Apiaries in America, and address these ques tions to you, hoping you will give them your early attention.

The value of such a compilationas we have undertaken, must be aparent to every thinking beekeeper.

We are expending large sums of money in this work, and your failure to comply would defeat ail our plans.

We will take pleasure in sending to all who comply with this request, a copy of the "Western Ipiarian."
ist. How many colonies of bees have you?
2nd. What kind of bees are they?
3rd. In what kind of hives?
4 th. Do you run for comb, or extracted honey?
5 th. From what plant does your honey chiefly come?

6th. What do you consider the average length of your season?

7th What is your largest yield from any one colony? (a) Comb,
[b] Extracted,
8th. What is your largest increase from any one colony?
gth. What is your increase for he season?
roth. The average crop being 100 , what would you place this crop at?
IIth. What is your average price for honey? [a] Comb,
[b] Extracted,
12th. Do you allow natural swarming, or do you divide?
${ }^{1}{ }^{3}$ th. What is your entire crop? [a] Comb
[b] Fix.
Any other information

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