FARM AND ORCHARD.

THE BEST METHOD OF PACKING FRUIT FOR MARKET.

Tobacco Seed Beds—Treatment of Young Fruit Trees—Expectations of a Cow—General Farm Notes.

We have yet much to learn in California regarding the marketing of small fruits, and the hard-earned experience of others should not be beneath our notice. S. B. Conover, an acknowledged authority, gives in the *American Garden* the following valuable hints:

STRAWBERRIES.

As moisture after picking causes small fruit to decay, you should avoid as much as possible picking while the dew is on or when the plants are wet from rain. By delaying the picking a short time the fruit will dry off, and it will keep and carry better, and consequently bring better prices in the market. This is a point that is very often overlooked in the hurry to get the fruit to market. Great care should be taken to have the picker pick all the ripe berries at each picking, as any left and picked next time will be over-ripe, and tend to destroy the sound fruit. The juice of one soft berry will ferment and spoil and injure the whole quart, and frequently the whole package. Care should also be taken that there are no unripe or small berries mixed in the packages. The packages should be well filled and rounded, so that they will be full when they reach market—the dealers will bless you for this, and the customer will be happy too. Of course, in doing this, you may give more berries to a crate than your neighbor, but it will pay you better. In finishing off packages, the top layer should be placed stem down, and the bright side of the berry up. They should be carried to a shady place, and be allowed to stand where the wind can blow over them to cool the berries and carry off any moisture that may be on them before the packages are placed in the crate. The cover of the crate should be left open until ready to load, to give air as long as possible; keep the crates in a cool and shady place. If the berries are sandy, as they frequently are after a shower, put them up without washing and do not top off with clean fruit, as that will injure your reputation with the buyer. All the old and experienced fruit-raisers have found that the best way to get the highest price for their fruit is to put it up honestly. Such packing enables the commission dealer to "chalk up" that mark or brand as being sold, and for which he is sure of getting the highest price. But if the fruit is not put up honestly and satisfactorily it has to be sold to peddler at low prices. The crate now used in New York markets, and giving the best satisfaction, is the 32-square-quart ventilated crate. In buying crates see that they are ventilated or have openings between the top of the crate and cover. The openings should not be in the cover, as they would let in the dust. The heat and sweat, in unventilated crates, rise up against the cover and condense, falling back on the top layer of berries and turning them black. There can be seen daily in the market, after the busy first sales are over, salesmen changing the top layers of baskets to the bottom, and bringing bright fresh ones on top. The berries should be picked ripe, or of full color, when to be sold within twelve hours after picking. If to be longer on the way, they should be a trifle under-ripe but yet full-colored. If to be sent by express, use the crate known as the express crate, costing a little more than half the price of the standard crate, and only half the weight.

RASPBERRIES.

The same care and attention should be used in picking and packing this fruit as in strawberries. For black-caps use pint baskets, but for the red varieties one-thirds and half pints should be used, as anything larger makes too large a bulk and the fruit is mashed by its own weight. There are long pint cups made and sold by the leading manufacturers which will fit in the 32-quart crate, so that the strawberry crate can be used for shipping black-caps.

BLACKBERRIES.

Blackberries should be picked and packed nearly the same as strawberries. They are shipped in quarts or long pints. Great care should be taken to keep out all bruised, soft or mashed berries. Packages must be well filled to allow for shrinking.

HUCKLEBERRIES.

The best package for this fruit is a quart measure, using the 32-square-quart crate. See that the packages are tight enough at the corners to prevent the fruit from shaking out. The leading manufacturers make a special quart box for this fruit, being closed at the corners, fitting the 32-quart strawberry crate. The fruit shipped in quarts always brings a higher price, and is of more ready sale than that shipped in half-bushel tight boxes.

CURRANTS.

Currants should be ripe, or nearly so, when picked. Keep out all bruised or mashed fruit, as a few mashed berries will ferment and turn the whole package sour in a very short time. They should also be as dry as possible. If picked wet they should be spread out thinly in a cool dry place before packing. They should also be free from leaves. The best package is the 32-square quart crate. The packages, when well filled, will hold on an average 1¼ pounds, and they are sold by weight. Some parties use the ten-pound covered veneer grape basket, but buyers mostly prefer quart packages.

TOBACCO SEED BEDS.

The following article, from the *Southern Tobacco Journal*, showing how Southern planters prepare and sow their tobacco ground, may be interesting to many of our readers:

To the planter an early and abundant supply of tobacco plants is the thing of prime importance. To secure this the seed may be sown at any time between the 15th of December and the 15th of March, the earlier the better, and allotting 100 square yards of seed bed to every 10,000 plants that will be needed.

The ground selected for this purpose should be virgin soil, of sandy texture, rich and moist, with full exposure to the sun, but sheltered to the north and west by rising ground, or growing timber, against the cold wind of early spring. Such spots can be readily found in wooded hollows, at the foot of hills, and near or alongside some water-course. Other things being equal, the further into the woods the spot selected is the better, in order to escape the bugs.

The ground having been well chosen, the next thing is to rake it cleanly, and then burn it thoroughly, so as to kill all germs of vegetation. The burning can be done at a single blast, if done with dry brush, heaped upon the entire bed a hight of some four feet. A better but costlier method is to burn with wood laid upon green poles, which serve the purpose of ventilation, in which case the wood should be piled the whole length of the bed and of convenient width, say six feet, and after the pile has been well kindled it should be allowed to burn some two hours, or until the poles underneath are burnt up. The burning wood and fire coals should now be moved by using old hoes fastened upon long handles, and again spread a convenient width and fresh wood added, which should burn until the ground underneath has been burnt as thoroughly as before, and so on until the entire bed has been burned over.

So soon as the ground has cooled enough to walk upon it, and without removing the ashes, it should be broken deeply and finely with the mattock, care being taken not to invert the soil, and then chopped with wooden hoes and raked until clear of roots and well pulverized—for which reason land should never be burnt when too wet.

The bed is now ready for seeding. The variety of seed recommended is yellow Oronoco. The quantity sown should be one and a half tablespoonfuls to every one hundred square yards. Great care should be taken to sow the seed as regularly as possible, so as to prevent some spots from being too thin, and, what is worse, other spots from being too thick. To do so the seed should be carefully measured and then thoroughly mixed in a convenient quantity of dry ashes, and the mixture divided into two equal parts.

The bed should be marked off into convenient sowing breadths by lines four feet apart, and sowed entirely over with one-half the seed in one direction and then over again with the other half in the opposite direction, the sower retracing his steps. The seed should be left upon the surface, and neither hoed nor raked into the soil, but trodden in with the foot or pressed in with the back of a weeding-hoe, or, better still, by passing a light roller over the bed. To prevent drifting or puddling of the seed by washing rains, where the ground is rolling, trenches slightly inclined, and two inches deep and four feet apart, should be made with the mattock across the bed. Where the ground is flat and subject to being sobbed, it should be thoroughly drained, as nothing drowns more easily than the tobacco plant.

YOUNG FRUIT TREES.

Much depends upon how the young trees are managed the first year after they are planted. Severe cutting back is beneficial to the peach tree, and cases are known in which old trees have been induced to make new growth and continue bearing, even when nearly gone, by cutting all of the old wood away above the trunk. Low, stocky trees stand the winds better, and the fruit is easily picked, but the cultivator cannot be used to advantage as among tall trees. The failure to cut back severely the first year, however, often results in but little new wood and a poor start for the young tree, which should be guarded against, as the future of the tree depends upon its progress during the first season.

THE WORK OF THE ROOTS.

The greater the work done by the roots the more rapid the growth of the tree; but there is such a thing as giving the roots more than can be done. By cutting back the young tree at the time of setting it out, and allowing but few shoots to grow, the power of the roots will be thrown into them, and as the roots will not be overtaxed, the tree will begin at once to grow, and grow rapidly, each shoot pushing forward as if to excel the others; but when too much top is left on, each shoot of the many will draw upon the roots and the result will be that but little growth will be made, while the tree will be slow in coming into bearing later on. By securing as much growth as possible the first year the future shape and trimming of the tree can be done to better advantage, and this is effected only when the young tree is allowed to grow from a limited number of shoots, and when it is cut back so as not to impose too much duty on the roots.

FERTILIZERS AND CULTIVATION.

The young orchard should be kept clean the first year, and the more frequently it is cultivated the better. Grass should not be allowed in a peach orchard at any time, though on rich soils grass is sometimes grown in pear and apple orchards, but only after the first year. Unrotted manure is too heating for young trees, and the best manure is that which has been composted. What is better, however, is an application of wood ashes every spring, applied liberally, after the first year, with 100 pounds of superphosphates in the fall. Young trees so treated will thrive, provided the very important work of destroying insects of all kinds is carefully attended to.—*Philadelphia Record.*

GREAT EXPECTATIONS OF A COW.

Daniel F. Appleton, of New York, proprietor of the Appleton farm, in Ipswich, has a cow which, it is believed, will beat the butter-making record of the country. The year's trial will be completed this week. At the end of the fifty-first week the record was 931½ pounds of butter. The highest previous record in this country was by a Kentucky cow, which yielded 936 pounds in fifty-two weeks.—*Quincy Ledger.*

FARM NOTES.

The old and long-established Chester white hog still holds a leading position among the white breeds of hogs.

Soak your seed-corn for forty-eight hours in a solution made by dissolving a pound of bluestone (sulphate of copper) in one gallon of water, as a preventive of rust.

The value of any kind of fodder is not in its quantity, but in the amount that is digestible. The quality largely depends on the degree of growth when it is cut and cured.

Now that the teams will be busy it is important that the harness fits the horse. Galls and sores on the horse may be avoided by giving some attention to the harness.

Small patches of wheat have been grown which produced at the rate of 100 bushels per acre, yet the average yield of wheat in this country does not exceed 12 bushels.

Do not work the horses too steadily at first. A horse that has stood in the stable all through the winter, doing but little work, is in no condition for doing a heavy day's labor.

If you cannot keep the number of animals you have on your farm do not try to get more land, but sell off a portion of the stock. Overcrowding is as injurious as too much room.

Dry soils should receive flat cultivation and damp soils should be ridged. The object, in the first place, is to save as much of the moisture as possible, and, in the second, to get rid of the excess.

Alfalfa grows rapidly and should be cut as soon as the blue flowers appear. It thrives better when cut, and becomes thicker. It is fully the equal of red clover for stock, and contains a larger proportion of nutriment.

A correspondent of the *Mirror* states how to avoid rot and scab in potatoes: "Roll the land, and when the potatoes are four inches high sow on a mixture of fifteen parts of plaster, three parts slaked lime and one part of fine salt."

Variation of the food promotes appetite. All animals become disgusted with the sameness of food. When food is refused tempt the animal with something else. In this manner sickness and loss of flesh may be avoided, while the cost may not be necessarily increased.

Do not plant corn on the same land that you grew a crop of corn upon last year. A rotation of crops is best. When the location for corn is changed every year there is less liability of attack from rust, and the soil is not compelled to perform the same duty twice in succession.

While the weather is dry the roots of plants will quickly dry if exposed. It is best to pour a little water around the roots of plants that are transplanted, as it will prevent many of them from wilting. If the ground below the surface is quite damp, this precaution is not necessary.

If pullets for next year have not been hatched, it is time it should be done. If the hens do not begin to sit until late, use eggs from the Leghorn breed, as such pullets grow rapidly and mature before they are six months old. The Leghorns are non-sitters, and lay more eggs than many other breeds.

It is a pleasure with those who live on the suburbs of towns and cities to keep a few hens. A small flock will cost but little, as the scraps from the table and any waste material will provide a large share of the food. It is claimed that as many eggs are produced in suburban sections as on the farms.

To get a full crop of potatoes use plenty of manure or fertilizer. If manure, let it be fine and well rotted and applied liberally in the rows. If fertilizer be used it should be applied in quantity to push the plants vigorously and enable the crop to produce as much as possible. It does not pay to be too economical in the use of manure or fertilizer.

Bees, according to Professor A. J. Cook, are fond of salt. For this reason they are often seen hovering about urinals. This is a sufficient hint for the bee-keeper to keep a shallow dish of salt and water where the bees can get access to it. Probably clear salt put near them, under cover, would draw moisture enough during wet weather and dewy nights for all practical purposes.

J. H. Hale, authority on such matters, says that the peach grub, commonly called peach-borer, has been destroyed with caustic potash made into a strong lye, with the addition of lime and carbolic acid, to which a little arsenic is added, and sometimes a little clay to make it adhere to the tree. The earth is drawn away from the root of the tree and the mixture is applied with a swab.

When the farmer churns his milk and sells butter he does not deprive his soil of fertility. The butter may be fed to swine and poultry with profit, but when meat and eggs are sold the fertility of the soil goes also. Nothing robs the soil faster than selling milk, and unless the farmer procures fertilizers or buys a large proportion of bran and linseed meal his farm will deteriorate in quality.

If any of our readers have a graft they desire to bear early, if they will bend it over and tie fast to a branch below it, or tie a weight to a string suspended from it, the gradual bending of the graft will check the growth of it and cause it to put out fruit spurs, and an early bearing will result. This plan is only of value where we want to quickly test new varieties, and is, of course, not intended for orchard use.

The better the quality of the manure the less the cost of handling it. Bulk does not give quality, and this is especially the case with manure. To haul and handle great quantities of unrotted, coarse, bulky material costs the labor of both men and teams. It is claimed that a ton of ordinary stable manure contains only twenty-five pounds of fertilizer in the concentrated form, and it is as expensive to handle this twenty-five pounds as it is to handle manure twice as valuable.

It is thought that in the agricultural districts botany should be a study in the public schools, and that one day in the week should be given up to lectures on soils, plants, breeds of stock, cultivation, fertilizers, etc. Such studies are not uninteresting to children who are accustomed to the farm, and they would quickly comprehend the lectures from the aid imparted by every-day experiences. No doubt such studies would be of much benefit to the coming generation and lead to better systems of farming.

HE WON THE BET.

How Count Zichy Outwitted the Customs Officer.

The famous Hungarian, Count Zichy, who lived on a princely income in Vienna, was in his younger days well known all over Europe on account of the bets he made and generally won. Once, when there was a heavy duty imposed on every head of cattle entering the Austrian capital, he made a bet that he would carry a lamb duty free through the gate of Vienna, and that the gate-keeper, who acts as imperial officer, adjusting and receiving the duty, would be glad to let him pass.

Next morning the Count, disguised in the clothes of a butcher, his butcher-knife in his hand, his shirt-sleeves rolled up, and carrying a heavy sack on his shoulder, made his way to one of the fashionable gates of Vienna, but the watchful officer soon espied him.

"What have you in that sack, fellow?"

"A dog, sir."

"A dog? Dog yourself! Down with that sack! I know fellows like you sometimes carry dogs in sacks through the gates and sell them for mutton in town. Down with your sack!"

"But it's nothing but a dog, and a bad dog, too. I will—"

"Never mind what you will. Down with your sack!"

The officer pulled the sack from the supposed butcher's shoulder, cut the string, and, sure enough, out jumped one of the biggest dogs in Vienna. The dog rushed against the faithful Government servant, landed him several steps away in the gutter, and then left for parts unknown. After him went the young butcher, shaking his big knife before the eyes of the frightened officer, and exclaiming:

"I'll settle you after I catch that dog."

About two hours afterward the face of the butcher appeared before the raised window of the gate window.

"I have just caught that dog again. Would you like to look at him?"

"Get away! Get out, you and your infernal dog!" And with a crash the window went down, and the smiling butcher entered Vienna.

But no dog was that time in his sack, but the fattest lamb that could be found in the suburbs of the capital.

OH, BY THE BYE!

In my sanctum I sat one day, nervous and tired,
With a mountain of work yet to do,
When in came a fellow who said he desired
To consume of my moments a few.
He talked for an hour, but at last he arose
And his form disappeared through the door;
But it opened again, and he stuck in his nose
With an "Oh, by the bye!"
And he came back for a half hour more.

He sat on the edge of a cane-bottomed chair,
With his hat tilted back on his head,
And he talked with a breezy and nonchalant air
'Till I wished I was crazy or dead.
When this second infliction he brought to a close,
And had bowed himself out as before,
I returned to my work—but he stuck in his nose
With an "Oh, by the bye!"
And he came back for a half-hour more.

He had lungs that were leather and cheeks that were brass,
And his voice tore my nerves like a saw;
If Sampson had met with this tedious ass
He'd have killed him, I know, for his jaw.
He talked and he talked till I itched in my toes
To kick out this unparalleled bore;
Then he left, but a third time he stuck in his nose
With an "Oh, by the bye!"
And he came back for a half-hour more.

And I sat there like one in a horrible dream,
Assailed by the gibbering imp,
Unable to stir hand or foot or to scream,
Perspiring, impassive and limp,
But when the fourth time he ended my woes
I sprang up, slammed and bolted the door,
For fear lest again he would stick in his nose
With an "Oh, by the bye!"
And come back for a half-hour more.

Then I said to myself: "There is not upon earth
An affliction so grievous and dire
As the fellow who comes with addenda of mirth,
Who repeats till you nearly expire;
And there's not such a fiend, I will add ere I close,
This side of the sulphurous shore
As the talkative nuisance who sticks in his nose
With an "Oh, by the bye!"
And comes back for a half-hour more.

—*George Horton, in Texas Siftings.*

Last year the world raised, 2,000,000,000 bushels of wheat. The United States grew 490,000,000 bushels; France, 306,000,000; India, 237,000,000; Russia (with Poland), 300,000,000; Portugal, 9,000,000; Denmark, 5,000,000; Spain, 73,000,000; Switzerland, 2,500,000; Germany, 84,000,000; Hungary, 95,000,000; Asia Minor, 37,000,000; Persia, 22,000,000.

THE THROAT.—Brown's Bronchial Troches act directly on the organs of the voice. They have an extraordinary effect in all disorders of the throat. Speakers and singers find the troches useful.

COMMERCE IN ECUADOR.

SOME QUEER MERCHANTS AND STRANGE COMMODITIES.

Fannie B. Ward's Description of a Commercial Center in a South American Republic.

[Special Correspondence of the RECORD-UNION.]

GUAYAQUIL, Ecuador, 1890.

As this is the commercial center of the Republic—in fact the only place within its borders worth mentioning in connection with trade—its merchants carry considerable stocks of goods, some claiming half a million dollars worth or more, with an annual trade of double that amount. Few of them, however, are Ecuadorians, the heaviest importers being Chinese. The latter have driven so many native dealers to the wall, and continue so persistently to extend their monopolies that the Legislature has lately passed a law prohibiting the further immigration of Chinamen to Ecuador.

The Celestial, transplanted in this congenial soil, does by no means confine himself to the company of his own countrymen and women, as in California and elsewhere, but blossoms out as a leader of society, and delights to share his wash-tub, opium-pipe and marital attentions with representatives of other nationalities. His several wives are generally low-class Ecuadorians, in whose veins circulates a regular ollapodrida of Indian, Spanish, negro, and may be Anglo-Saxon blood, and whose leather-colored skin is not a bad match for his own saffron-hued complexion; the main difference in "looks" being in the eyes—those of native women being very large, and not set in on the bias, as seems to be the fashion of the Flowery Kingdom. The offspring of this

POLYGLOT PARENTAGE

Have not much to show in the way of beauty, but are hardly more prepossessing than that strange cross between Creeks and negroes one sometimes encounters in the Indian Territory, who have kinky hair, high cheek bones, reddish eyes and flat noses.

The lower floors of the houses along the principal streets are used for shops, while the merchants and their families, of whatever nationality, live above them. During business hours the entire front of each house is removed—partly to allow freer circulation of air, the heat being so excessive, and also to show off the wares to better advantage, for these ground floors have no windows.

Ecuador's exports bear no proportion to her real capabilities; and there is no excuse but laziness for the chronic bankruptcy of the country. The shipments of cocoa, coffee, India-rubber, hides, chinchona bark, nuts, vegetable ivory, orchilla-weed, sarsaparilla, cancho, tamarinds, etc., amount to about $6,000,000 per annum. The President asserts that Ecuador imports fully $10,000,000 worth a year; but as the Government keeps no statistics of its commerce one may be pardoned for doubting the truth of his Excellency's statement, which is based merely on the amount of duties collected. It hardly stands to reason that the most impoverished and backward country in all South America could long continue to purchase twice as much every year as she sells. Most of the imports come from England. The United States furnishes little but lard; and all the flour comes from Chile.

Ecuador is famous for only two things—for making the best straw hats and raising the finest pineapples in the world; the credit for the latter being entirely due to Dame Nature, and for the former to the native women who weave them. The well-known "Panama hats" are all made in Guayaquil and the Indian villages along the coast, but none outside of Ecuador, and this name comes from the fact that formerly Panama merchants controlled the trade.

The best hats are made of *Toquilla* fiber (Carludovica palmetto)—an aborescent plant, which grows about five feet high and resembles the palm. Its yard-long leaf is plaited like a fan and the stalk is three-cornered. The leaf is cut while young, the stiff, parallel veins removed and then it is whipped into shreds and immersed in boiling water. Afterwards is is bleached in the sun.

Mocora fiber is also used, from a tree that grows like a cocoannut; but more rarely, because difficult to work, as its bark is extremely hard and thorny. Its leaves are so long that the straws will finish a hat without splicing. *Pita* fiber—a species of cacti—is also much employed.

THE BEST HATS

Are woven under water by women who kneel beside a stream and keep the straws constantly submerged. It requires three or four months to make a good hat, and when finished it will bring all the way from $15 to $150. But it will last a lifetime, can be rolled up and packed away in a vest pocket, cleaned as often as required and worn either side out, as the inner surface is as smooth and well-finished as the outer.

A great many hammocks are also made from pita fiber and dried grass. An enormous quantity of cocoa is produced, though but a fraction of it is gathered, owing to the scarcity of laborers. The cocoa of Ecuador is second in quality only to that of Venezuela, the latter being considered the best in the world. Three or four kinds are indigenous to this coast, and it is here called cacoa, to distinguish it from the erythorxylon cocoa, from which cocoaine is made—these all deserving their generic title of *Theobroma*, meaning "food for the gods."

Perhaps the best grows in the vicinity of Esmeraldas, as it has the pleasantest flavor and contains the largest amount of oil; but it rots so quickly that little of it is exported, The "cocoa de arriba" from up the Rio Guayas is most desirable to export, as it keeps two or three years without damage. Next in order comes that called "cocoa de abajo," from near the river's mouth—from Santa Rosa, Balao, Machala and other places below Guayaquil. A still richer nut is the mountain cocoa, but that is never cultivated. It is small, white and almost pure oil; and from it "cocoa butter" is made—used by the natives for burns, sores, cuts and cutaneous diseases, and by women the world over for beautifying the complexion.

THE COCOA TREE

Resembles our lilac in shape and size, and yields three crops of fruit every year—in March, June and September. Its flowers and fruit do not grow upon twigs, but directly out of the trunk and branches. Baron Humboldt said of the cocoa palm, "A more striking example of the expansive power of life could hardly be met with in organic nature." The fruit is yellowish-red, in shape and size not unlike a cucumber, and the brown seeds inside of it—the "cocoa beans" of commerce—are enveloped in a mass of white pulp.

Strange to say, chocolate costs more here by half than in the United States at retail; probably owing to the fact that here it is all cocoa, while its importers have learned that pipe-clay is harmless as a beverage and greatly increases the weight of their so-called chocolate. Spain is by far the largest consumer. The Mexican word chocolat is the origin of our word for the beverage, here pronounced as if spelled chalk-o-lat-ah.

The best chocolate is prepared by first burying the fruit until the pulp is decayed and only the beans are left. These are roasted and their shells removed. The chocolate is then ground between stones into a soft mass and poured into molds. The melted chocolate is pressed in bags, precisely as Northern housewives make jelly, till all the oil is expelled. The sediment is then ground very slowly to prevent remelting; after being "bolted" is ready for use. That there is so little pure chocolate in the market is partly owing to the great medical value of its oil, which is expressed in the grinding. The consumer would better purchase cocoa nibs, if he can, which are the crushed beans before they have been ground.

Cocoa leaves are also sent from here, but the quantity has been greatly diminished since Dr. Koller, of Vienna, discovered the alkaloid cocoaine; whereupon the English Government at once dispatched a commission to transplant the tree in its Indian colonies, and now India supplies the world with that murderous drug.

THE COFFEE OF ECUADOR

Is fairly good, though but little is exported. It grows on a tree about eight feet high, with glossy, dark-green leaves, flowers resembling orange blossoms, and yellow, green and purple berries all at the same time. Each tree yields an average of ten pounds a year.

Another staple of Ecuador is *chincona* or "Peruvian bark." It takes its name from the Countess of Chincon, who was cured by its use of intermittent fever, in Lima, Peru, about the middle of the seventeenth century. It was then introduced into Europe, and the knowledge of its curative powers has spread throughout the earth. Comparatively little of it grows in Peru, except near the northern border.

That familiar medicine, quinine—an alkaloid made from Peruvian bark—was discovered in 1820. The same bark has been found to contain several other alkaloids, but none as important as quinine. In some countries it is almost as necessary a provision as food, and no traveler will venture into a malarious region without it. In Ecuador there are twenty-two varieties of trees that produce the bark from which quinine is made, but many of the most valuable are now nearly extinct, owing to the reckless way in which they were stripped. They flourish not only on the slopes of the Andes, but equally well in Java, India, Algeria, Mexico, the United States, and wherever they have been transplanted.

CHINCONA COLLECTORS.

Are now obliged to go far into the forest in search of trees, and suffer many hardships in pursuing the industry. Mr. Knox, the author, tells of a Quito gentleman, who asserted that he had seen a chincona tree sixty feet high, six feet in diameter, which yielded 2,000 pounds of green bark, or about 1,000 pounds when dry. Another tree that he saw gave $3,000 worth of quinine. Such trees are rare nowadays, but a few of them would make one's fortune, considering the rate at which quinine is retailed per grain, and the enormous quantity consumed.

Ecuador furnished an endless variety of tropical fruits, especially in the vicinity of the Guayas river, which are brought down to passing steamers on *balsas*, an odd sort of raft, made by lashing half a dozen balsam logs together and flooring them with split bamboo. These highly original crafts are about the most picturesque objects to be seen on the river, and having been invented by the ancient Peruvians, are precisely the same to-day as those that met the eyes of Pizarro and his gang, more than 350 years ago. Balsam wood is as light as cork, and remains a long time in the water without any tendency to absorption. The rafts vary in size, the logs in some being longer and more numerous than in others. They are the homes of a considerable "floating population," most of them having a hut on top, whose dried thatch looks in the distance like

A WANDERING HAYSTACK.

This forms the sole roof tree and habitation of the owner and his family, who spend their lives contentedly on the water, literally sharing bed and board with the household pets, to which all are addicted—black pigs, fowls, dogs and monkeys.

When a steamer anchors anywhere along the coast of Ecuador, always, of necessity, away out from shore, it is presently surrounded by these balsas, each loaded with strange dressed or nearly naked natives of swarthy hue, clamoring to sell fruits, monkeys, melons, parrots or specimens of wretched pottery. As mentioned in a previous letter, the lower decks of the steamers that ply these waters are open, and used as a sort of general store-house for all manner of commodities, from cattle to precious metals. Proceeding on its southward way, it gradually becomes packed to the roof with an odd collection of goodness knows what in the line of fruits, in small stacks, each the property of a different individual, who goes all the way to Valparaiso and back, a voyage of fifty-four days, in order to dispose of it to whoever may come on board to buy at intermediate ports. Many of these itinerant traders are women, and they sleep on top of their stores of oranges, pineapples, bananas, etc., regardless of the scorpions, vipers or other vermin that may be lurking in the yellowing heaps. Every *comerciante* has a traveling companion in the person of a parrot or monkey, which sleeps at her side and eats out of the same dish, until sold. On this side of the continent, a fairly respectable monkey can be bought for about $7; but we intend to defer any investments in that line of goods until the Amazon country is reached, where these strange creatures that mock humanity flourish at their best, or worst.

THE RIVER FRONT

Of Guayaquil presents a lively scene all the year around, while the rest of the city locks, by comparison, like "some banquet-hall deserted." British steamers from Panama and Payta arrive once a week, and Chilean steamers twice a month, while Yankee steamboats run regularly up and down the river; half a dozen sailing vessels, principally French, are always lying in the harbor, and hundreds of dug-outs, rafts and canoes are constantly gliding to and fro. But the balsas are most attractive to the stranger, and his curiosity never flags as to what their varying cargoes may be. Many contain nothing but guavas, figs, mangoes, papayas and other tropical fruits never seen in the North; others are laden with fish, of strange species known only to Spanish epicures; others bring ice, away down from the distant peak of Chimborazo, which sells in the city for $1 per pound, and when a flag is hoisted over a favorite cafe, it announces that snow has arrived from the mountains and ice-cream can be had. Other balsas are loaded with water, in jars or barrels, brought from a point twenty miles up the river out of reach of the brackish tide. The cries of the half-naked boatmen, "Pescadoes!" (fish) "Naranjas!" (oranges) "Pinas!" (pineapples) etc., are as characteristically a part of the morning scene as the sunshine itself.

Still more interesting is the bray of the water-bearing donkeys as they trot through the streets selling the indispensable liquid, for there is not a drop of fresh water in the locality. Each beast is laden with two casks, or enormous earthenware jars, slung one on each side of him in a sort of raw-hide frame. Though one sees many men and women on the streets pretty much unclothed and children entirely so, the donkeys all wear the funniest-looking pantalettes, not from motives of modesty but to protect their limbs and bellies from the attacks of the gadfly, whose sting is like the puncture of a red-hot darning needle.

Bread, as well as water, is peddled about the streets, unprotected from dust or other contamination, on uncovered trays toted on the heads of ragged, dirty and bare-footed men, who usually

ECONOMIZE

Their greasy hats by placing them on top of the load. In the streets are many small booths, where Yankee notions are for sale. The shoemaker puts his bench out on the curbstone; the tailor runs his American sewing machine on the sidewalk, and keeps his sizzling "goose" on the doorstone.

In the indescribably poor and filthy market-plaza the smallest of sales are conducted by Indian women, each dressed only in a short, scant and very dirty calico skirt and an extremely *decollette* chemise; while their lords and masters swallow the few pennies they can earn in the shape of *chichi*. If it happens that either sex desires to make a change of raiment—which is seldom done for purpose of cleanliness, but only when the vermin become unbearable—he or she is not in the least embarrassed or hampered by the presence of lookers-on, but calmly proceeds to disrobe in the public square.

There is another article of Ecuador's commerce which, though not reckoned in any market reports is worthy of especial notice, viz:

HUMAN HEADS,

Dried and pressed to about the size of your fist, each wearing the most life-like expression upon the perfectly preserved features. Most of the faces are elaborately tattooed and all have long, black hair; the lips sewn together with fibres twisted into coarse twine, hanging down over the chin in heavy fringe like that in a *macrame* lambrequin. Centuries ago a tribe of Indians living near the northern border of Ecuador used to preserve the craniums of their dead in this manner. Nobody now living knows how it was done, but it is supposed that the bones were all drawn out, bit by bit, through the neck and then the head was buried in the hot, dry sand until it shrank away to one-fourth its former size and became perfectly preserved. As household adornments these gruesome *recuordos* of

DEAD FOLK

Are certainly not handsome, but they are very curious, especially since the art of preparing them has long been lost and the sewed-up lips tell no secrets. They used to bring about $16 a piece, but now command all the way from $100 to $500 and are very scarce at that. Years ago the Eucadorian Government put a stop to this sale, as it was learned that some modern Indians, instead of dealing exclusively in the brain-pans of their defunct ancestors, actually made a business of preparing fresh ones for the market! Since long-haired ones sold for the highest price, they took especial care of the capillary adornments of their wives and daughters with a view to cutting their heads off one by one. There is no doubt that this traffic in dried heads cost many lives, for the price paid by museums and curio-hunters was enough to set an Ecuador Indian up in affluence for all the rest of his days, could he manage to judiciously market his superfluous children and relatives.

FANNIE B. WARD.

PAINS in the small of the back indicate a diseased condition of the liver or kidneys, which may be easily removed by the use of Dr. J. H. McLean's Liver and Kidney Balm. $1 per battle.

TEN POUNDS IN TWO WEEKS THINK OF IT!

As a Flesh Producer there can be no question but that

SCOTT'S EMULSION

Of Pure Cod Liver Oil and Hypophosphites Of Lime and Soda

is without a rival. Many have gained a pound a day by the use of it. It cures

CONSUMPTION,

SCROFULA, BRONCHITIS, COUGHS AND COLDS, AND ALL FORMS OF WASTING DISEASES. *AS PALATABLE AS MILK.* *Be sure you get the genuine as there are poor imitations.*

FRUITS, SEED, PRODUCE, ETC.

THE PACIFIC.

Christianson, Dierssen & Co., Proprs, 725 AND 727 J STREET.

GENERAL COMMISSION MERCHANTS, Wholesale and Retail Dealers in Groceries, Fruits and Produce. mr29-tf

THE CALIFORNIA MARKET,

At 712 K Street,

IS THE CLEANEST AND BEST KEPT MARket in this city. Everything sold as represented. Prompt delivery and satisfaction guaranteed. Depot for the celebrated OLIVE BRANCH BUTTER. FRESH FISH, DRESSED and LIVE POULTRY always on hand. Also, the best of FRUIT and VEGETABLES, or anything that can be found in a first-class market. GARZOLI & GENIS.

MINNESOTA POTATOES

We are now receiving train lots regularly.

Finest Table and Seed Potatoes in the Market. Try them.

W. H. Wood & Co.,

117 to 125 J street, Sacramento.

S. GERSON & CO.,

—WHOLESALE—

Fruit, Produce & Commission Merchants,

SACRAMENTO, CAL.

P. O. Box 170.

THE SACRAMENTO MARKET

CARRIES THE LARGEST ASSORTMENT OF Fruit, Produce, Fish, Poultry, Game, etc., to be found in the city.

CURTIS BROS. & CO.,

308, 310 and 312 K street, Sacramento

Telephone 87. [tf] Postoffice Box 335.

CURTIS BROS. & CO.,

General Commission Merchants and Wholesale Dealers in

Fruit and Produce.

308, 310 and 312 K st., Sacramento.

Telephone 37. Postoffice Box 335. tf

W. R. STRONG COMPANY,

—WHOLESALE—

Fruit and Produce

DEALERS,

SACRAMENTO..............[1p]..............CAL.

EUGENE J. GREGORY. FRANK GREGORY.

GREGORY BROS. CO.,

(Successors to GREGORY, BARNES & CO.)

Nos. 126 and 128 J Street......Sacramento.

WHOLESALE DEALERS IN PRODUCE AND Fruit. Full Stocks of Potatoes, Vegetables, Green and Dried Fruits, Beans, Alfalfa, Butter, Eggs, Cheese, Poultry, etc., always on hand. Orders filled at Lowest Rates. tf

A Noted Divine Says:

"I have been using Tutt's Liver Pills for Dyspepsia, Weak Stomach and Costiveness, with which I have long been afflicted.

Tutt's Pills

ARE A SPECIAL BLESSING.

I never had anything to do me so much good. I reccommend them to all as the best medicine in existance."

Rev. F. R. OSGOOD, New York.

Sold Everywhere.

Office, 44 Murray St., N. Y.

REAL ESTATE, ETC.

AUCTION!

AUCTION!

Edwin K. Alsip & Co.

Will Sell by Public Auction, on

Thursday, May 15, 1890,

On the premises, that desirable and eligibly-located corner lot at Fifteenth and P streets, being 80x160 feet in size. Good patent sidewalk, shade trees, curbing.

ALSO,

The lot 80x160, adjoining this property on the East, together with the buildings thereon, consisting of a splendid two-story house of 8 rooms, with modern conveniences; a large brick barn, capable of holding 4 horses and 10 tons of hay. The yard is seeded to blue grass and planted with choice shrubbery; the whole is in good order. This property needs no further praise, as it will bear close inspection.

ALSO,

At the same time, we will sell upon the above premises, a FARM of 253 acres, situate about 9 miles east of Sacramento and near Routier Station. Hops have been grown successfully on this land, which is now leased and sown to grain. The purchaser will have half this year's rental. TERMS and further particulars of the sale of all this property can be had at our office, and parties desiring to see it will be taken out.

This sale is made by P. HERZOG, Administrator, in order to close the estate of ROBERT MILLER, deceased.

Edwin K. Alsip & Co.,

REAL ESTATE & INSURANCE AGENTS,

No. 1015 Fourth Street, Sacramento.

W. H. SHERBURN, Auctioneer.

BUY A LOT NOW.

Prices are Advancing.

$1,200—40x160, K, between Twenty-first and Twenty-second.
$3,000—80x160, northeast corner Eighteenth and G streets.
$1,100—80x160, north side O, Twenty-ninth and Thirtieth.
$1,000—40x160, south side H, Twenty-third and Twenty-fourth.
$2,000—80x160, northeast corner Twenty-fourth and Q streets.
$1,250—40x160, north side Q, Seventeenth and Eighteenth.
$650—80x160, north side G, Twenty-ninth and Thirtieth.
$1,050—80x80, west side Fifth, N and O.
$375—100x120, Ingham Tract.
$1,000—40x160, north side J, between Twenty-fourth and Twenty-fifth.

☞ If you want to speculate look at this, 15 lots, 80x160 each, on I and J streets, for $12,500.

A. LEONARD & SON,

Real Estate & Insurance Agents,

1014 Fourth Street..................Sacramento

W. P. COLEMAN,

Real Estate Salesroom, 325 J street.

$1500—20 ACRES, SMALL HOUSE, BARN and chickenhouse; adjoining Florin.

$25 PER ACRE—80 ACRES NEAR LINCOLN, Placer county; good dwelling, barn. 627

TWO AND A HALF MILES SOUTHWEST OF Roseville—Good ranch of deep soil; black loam land, with living water on the place; all under cultivation; containing 213 acres. If a purchaser wishes, it can be divided into places of 106 and 107 acres each. At $35 per acre. No. 621.

$850—20 ACRES, ONE MILE AND A quarter from Newcastle, Placer county. A good fruit land. Must be sold. A BARGAIN.

MONEY TO LOAN.

P. BOHL. E. A. CROUCH. 1p

FOR SALE.

A DESIRABLE RESIDENCE PROPERTY OF twelve rooms, situated in the central portion of the city; has all the modern improvements—hot and cold water, heater, range, conservatory. Property cost owner $10,500; will be sold at a sacrifice on account of change of residence. For full particulars inquire of

MILLS & HAWK,

Real Estate Agents, 301 J St., Sacramento,

Sacramento Division Union Insurance Co. d&Sutf

SALE OF BONDS.

Central Irrigation District, Colusa County, Cal.

NOTICE IS HEREBY GIVEN BY THE Board of Directors of Central Irrigation District that said Board will, at its office in the town of Maxwell, in the county of Colusa, in the State of California, on the

21st day of May,

In the year 1890, at 3 o'clock P. M. of said day, sell to the highest responsible bidder, for cash in gold coin of the United States, one thousand bonds of the said district, to the amount of five hundred thousand dollars, being part of an issue of bonds aggregating the sum of seven hundred and fifty thousand dollars; that sealed proposals for the purchase of said bonds will be received by said board till the day and hour aforesaid, at which time said board will open the proposals and award the purchase of said bonds to the highest responsible bidder, but said board reserves the right to reject all bids, and will in no event sell any of said bonds for less than 90 per cent. of the face value thereof. Said bonds are dated the first day of July, in the year 1888, and bear interest at the rate of 6 per cent. per annum, payable semi-annually; any interest accruing between said date and the date of the sale and delivery of said bonds shall be credited, before delivery, on the first maturing coupons attached to said bonds. Said bonds will be delivered to the successful bidder, and the money received therefor, at the District Treasurer's Office in the town of Maxwell, or at the Colusa County Bank in the town of Colusa, county and State aforesaid.

(Above bonds approved by Supreme Court.)

The Supreme Court has decided that Central Irrigation District was validly organized, and that its bonds were properly issued and are in the form required by law. See Central Irrigation District vs. R. De Lappe, 79 Cal., 351.

R. DE LAPPE, Secretary of said Board.

Maxwell, Cal., April 7, 1890. ap9-td&Su

PAINTING.

J. P. CALENDINE, CONTRACTOR, PRACtical House and Sign Painter. Artistic Paper Hanger and Decorator. Honest work and satisfaction given at reasonable rates.

Residence, 2108 I street. mr28-tf&Su