THE BERMUDAS.

THE FAIRY ISLANDS OF THE SOUTHERN SEAS.

Coral-Topped Submerged Mountains—A Strange Land—Work of Coral Insects.

BERMUDA ISLANDS, April 15th.—This is the middle of the British Empire. You may not know, but it is. Around Bermuda revolve in their happy orbits England, Canada, Australia, India and all the dominions of the Queen. The first man I saw on landing was a soldier. The last men visible as I looked out of the window just now were 30 or 40 soldiers. Everywhere are uniforms, flags, cannon, stacked arms. Amputate Gibraltar and you have Bermuda. Every hillock is a fortress. The air is sulphurous with powder. The little islands in the bay are barracks and powder magazines. I never saw so much pomp and circumstance in my life. The island is only fifteen miles long and one mile wide, but a section of the British army is stationed here, under a Major-General, and the West India fleet of men-of-war winter here under an Admiral. There are only 1,200 acres under cultivation, supporting only people enough for a good village, but with only 800 votes there are over 500 office-holders; and there is a Parliament in the Upper and Lower House, and 45 members, and they make laws enough for the government of the whole eastern hemisphere. And on Sunday from the top of every house that is any house is unfurled the Union Jack in all its glory.

CORAL-TOPPED SUBMERGED MOUNTAIN.

Less than three days from New York, and I have landed upon the very top of a mountain higher than Mount Blanc. Eternal flowers, instead of eternal snow, crown its summit. The whole mountain is submerged beneath the Atlantic, and down its slimy sides play mullet and bream, chub and amber fish among the wrecks of Spanish galleons, and far below float, poised in the compact deep, the gold and silver coin lost by merchant men or wasted by pirates centuries ago. The twenty square miles of coral which constitute the visible peak of this mountain have been contributed by the humblest of terrestrial masons—a successful effort of an insect of the sea to prevent a continent from disappearing forever from the eyes of man. The little, half-organized, insensate bit of mucilage known as the "zoophyte," has caused this vast extinct volcano to burst into bloom; and here, where the yawning crater was, all tropic fruits and flowers find their perfect maturity in the midst of the northern winter. On this crescent of 300 midget islands, or coral reefs, nature has not been lavish of her gifts. She gave it no soil, no rock, no water, no animal life, no vegetation. As far as can be seen, all the beauties and graces that now attract thousands of tourists a year, were exotics, except the marvelous weather. There is scarcely anything even now that can be called soil. What there is has been distilled from the sea by the little zoophyte. These islands—no, let us say, this, instead, for that named Bermuda is the largest and the one on which reside most of the 14,000 inhabitants—is

MERELY A WHITE CORAL REEF,

With a thin skin of verdure on its surface. The coral has assumed various forms. In one place it is simply calcareous sand drifted up from the coral sea and blown inland, on another sundry parts of the marine limestone have been washed out by the rain, leaving a rough, bony skeleton like the scoria of volcanoes; in still another the other inorganic substance which coral contains—besides carbonate of lime—such as the proxide of iron, alumina and silica, have united in what is called "red earth," which, mixed with vegetable mold, contributes the principal soil of the islands. This last is only one per cent. of the whole, but it is enough to form several sizeable pockets and mask the naked coral in a good many places. The island is thick studded with trees, shrubs, flowers, grass of nameless sorts and unnambered varieties, all brought here from other lands, I suppose, for even the cedar, which grows everywhere and seems indigenous, is exactly like the Virginia cedar, and was evidently transplanted hither by Sir George Somers, who settled Bermuda from that colony during Captain John Smith's honeymoon. Somers explicitly relates that he found no living being on the islands, except droves of wild hogs, resulting from a pair left here by a previous navigator. "They," he said, "have overrun and possessed all of the lands." This shows that, though Sir George says nothing about the build, it was the ordinary British hog familiar to tourists. The only wild animals here at present are mice and whales, if they will permit me to mention them together.

THE ONLY FRESH WATER HERE

Is that which falls from the clouds. There is a law compelling the inhabitants to save it. Every house must have so many square feet of roof, always made of slabs of coral. Every roof must have so much eaves-trough, also of coral. Every eaves-trough must have a big coral cistern of corresponding capacity. Then every knoll, being without soil and barren, is skinned of its slight verdure, whitewashed, and used, not for an advertising board, but for a rain-shed, and around its base is a trough of cement, running the water into a coral cistern.

Never have I tasted more delicious water anywhere. It has none of the pluvial flavors common to all other rain water I have ever tasted; it is sweet, pure and limpid, as if drawn from the choicest mountain springs. The tanks are all white-washed and exposed to the sun—and the sun in this latitude is sometimes hot—but you may open the hot door on the hot side and dip up some water, and find it quite as cold as it is wholesome to drink—almost as cold as ice water. The secret of it is that the tanks are built of the porous coral, and this serves as a rapid evaporator, like the porous chalk bottles of Guadalajara in Mexico.

HOW TO BUILD A HOUSE.

In no country outside of the United States have I found so large a proportion of landed proprietors as here. More than half the heads of families own the houses they live in; nor is this difficult; for everybody owns a quarry, and it extends all over his place, or rather under it. When a man is ready to build, he merely takes a handsaw, sticks it down into the coral under foot and saws out a solid block, white and soft. This he lays at one side. Then he saws out other similar blocks, the coral sawing about as easily as Connecticut chestnut. He piles the blocks up to dry and harden. Finally he lays up walls that look like marble, roofs, and, lo! he is housed. Everywhere these shine, white and dazzling like the stucco tenements of Naples, or the Moorish tenements of Spain or Mexico. To a stranger, Bermuda looks like an island of chalk, covered with dwellings of chalk.

HOW THE BERMUDAS GREW.

When the Atlantic continent sank beneath the sea, and the last pinnacle of rock disappeared forever, the zoophytes came from southern seas and began their work of building a beautiful coral reef around it, like the gorgeous crown the Persians constructed for the dead king. These polyps—gelatinus and shapeless creatures, without legs or hands or heads, or even stomachs, called "coral insects" by the earliest writers about them—were away from home. They were on the very northern edge of the coral-building zone, 500 miles north of the tropics, but they went at work briskly—or, rather, they began to live. From the water they distilled lime for their branching bones, as oxen do from grass, and when they died they left these bones, in the shape of white and red coral, to fill the shallow water over the mountain's top. Through centuries the work went on. Higher and higher were piled the bones in the coral cemetery. Here and there the reef stuck out of water at low tide, and on the windward or southwestern side the wind blew the lime-sand of the pulverized coral into heaps. So these islands were formed at last—so they are forming now. I walked across the narrow island yesterday, and on the south shore

CLIMBED A HILL OF CORAL SAND

One hundred feet above the sea, perhaps. There, in the middle of a great level sand-hill, stuck out the chimney of a house. The house to which it was attached was buried underneath by a hurricane of sand which blew down the beach one morning, twenty-two years ago. In a house fifty rods off I found an old darkey who was here at the time and witnessed the catastrophe. It was a large stone house—the residence of a planter. For some weeks the wind had blown from one direction, and came up the hill and piled against the house; but one day a vast sirocco of sand filled the air with a whirl and blocked up the doors in an hour. The family and attendant slaves got out of a window and escaped, and when the storm subsided only the top was visible, as it is now, even the roof being covered. I pushed my way through the oleanders and orange bushes now in blossom over the house, and looked down the old chimney. The room below was dark and mysterious. It is a wonder that the Bermudians do not lower a small boy by a rope and let him see what he can find, and it would even pay them to dig a tunnel in through the sand to the front door or a window, and open the ruin as one of the show places of the island.

OVER THE CORAL GARDENS.

In a little steam tug we went "out to the coral reefs"—a crescent of shoals facing the northern shore, ten miles off. In their vicinity the waters of the bay put on motley hues, ranging through the tints of every color—yellow, peacock blue and apple green, and here and there a well defined belt of red and purple. Over one of these last we anchored, the reef was only four or five feet under the boat, and it was very rich in colors. The water was rippled by the wind, but to offset this we used a "water-glass." A water-glass is a square bucket with a plate-glass bottom, and by lowering it just below the surface it breaks the waves and renders all below almost as clear as if seen through the air. The very first glance through the water-glass excited wonder, which was constantly increased. It was the revelation of a new world, as if one could get a bird's-eye view of the strange vegetation of the planet Mars. The whole bottom was a field of coral, dead and living—the dead, white and ragged, the living trembling and waving above their ligneous homes like many-colored jellies. We could see the great masses of brain coral, some whitened sepulchres, some a vivid green, showing that the shell was still inhabited; near by was a grove of the purple gorgonial and all sorts of

FLUTTERING AND FEATHERY THINGS.

There were yellow sponges, standing up and beckoning like human hands, and bunches of seaweed of all shades of olive and bright green and red. What surprises us most is that almost the whole bottom is coralline. Eight feet under the bow is spread a minic garden. The growing corals look so much like flowering plants that it is not remarkable that Reaumus and all the old naturalists classified the coral as a vegetable growth. There is a broken hedge of fan coral of a bright brick red, and growing under its side, as if in its shadow, a mass of brilliant things that look like thistles, marigolds, carnations, asters, daisies and gazanias; they have evidently been flung over the hedge in clearing the garden, but they have persistently taken root again and gone on flowering. The branching coral grows like a tree, putting forth branches, and each branch is covered with buds and each bud is a young polyp. The base is dead and forms a part of this reef, but each of the living branches (green or yellow) is tipped with its sea-anemone which goes on drinking of the sea and depositing lime in the skeleton of which it is at once the mother and the child. In many places the fringes of fluttering tentacles, reaching upward, are so conspicuous that they quite mask the coral and hide it from view.

THE BRAIN CORAL

Grows here finer and larger than anywhere else in the world. When alive, the curious cerebral labyrinth on the surface is still visible, but somewhat obscured by the myriads of tenants which appear to be little more than a scum of yellow mucus. Looking down from one of the windows in the cabin we can see a curious sight. Here is one of the edges of this section of this reef, making sharp off in a perpendicular wall as a cliff, down which we can look some thirty or forty feet. The side of this precipice is covered richly with sea flowers—many sorts of coral in all stages of death and life. It is like looking down the steep side of a mountain. Mimic trees are growing there, like the spreading antlers of an elk, like arbor vitæ bushes turned to crimson and gold. Star coral gleams there, sending out its purple tentacles like petals around a thousand pretty disks. Sponges flutter and wave along the dizzy freight. Sea anemone cluster like half a dozen Marshal Neils on one stalk. A few specimens of brain coral has tumbled off and has caught in the antlers. We fish up some of these with hooks and tongs, and at last, as the tide rises, we turn home again across a sea surpassing the bay of Naples for loveliness.—[Cor. Memphis Avalanche.

The Cause of Dyspepsia.

"Oh, I'm used up with the dyspepsia," declared a sour-visaged, discontented-looking man to an acquaintance as he leaned against a bar chewing a nutritious toothpick. "I'm only one of thousands," he added, with a heavy sigh, "who have been made dyspeptics in America by the adulterations of food. No use to talk climate or cookery to me. It is the adulteration of food that creates dyspepsia. Why, bless you, the American cooking is on the average the best in the world, but it is almost impossible to get anything pure to cook. Alum is mixed with yeast powder, baking powders are adulterated with chalk and sugar, syrup and honey are extensively doctored. The first three are adulterated with glucose, which is manufactured by treating starch or woody fiber with sulphuric acid. It is never advertised—glucose isn't—I can tell you, and it isn't easy to find. A large dealer told me the other day that he didn't believe he'd had any genuine molasses in his store for years. I never buy any honey unless I can get it from an intimate friend. Milk is weakened with water and colored with a preparation made in the East. It is not generally known, either, but it is a fact, that the milk of farrow cows is unfit for food, being filled with an effete excretory matter. And butter—laugh!—it is not only adulterated, but counterfeited. Fat cheese is made from skimmed-milk mixed with lard and tallow so skillfully as to defy detection. I was at an exhibit of butter and cheese in the State of New York awhile ago, where the first prize was awarded to a cheese which the makers, with pride, mind you, with pride—afterward affirmed to be a manufactured article.

"Do you know what gluten meal is? No? Well, you see that advertisement, but you don't see glucose. It is a product incident to the manufacture of glucose. Fine fruit flavors—what do you think they are largely made from? Ah! the chemist has wonderful resources. They are made to a great extent from rotten cheese, fusel oil, sulphuric acid, ether, and other things quite as injurious to the delicate linings of the stomach. Many of the soda water syrups, confections, and jellies are flavored with such stuff. Of course a few persons use genuine fruit flavors. The sourness of lemon syrup and lime juice is strengthened with sulphuric acid. Candy is composed largely of glucose and flour. Mighty little pure sugar goes into it. Manufacturers claim the substitute which is made from corn is not objectionable. Candy is adulterated with various substances. Sometimes terra alba is used, and the coloring matter is often highly objectionable.

"Tea is adulterated with willow, oak, birch, elm, and other leaves, and with spent tea leaves; also, with poisonous colorings. Ground coffee sold in packages is often quite a counterfeit. Among the other coffee adulterations, besides the old stand by, chicory, are dried liver, beans, peas, all kinds of grain, tan bark and sawdust. Spices are mixed largely with inert substances, and then injurious matter has to be added to give them fictitious strength.

"Thirty-two deadly poisons are known to be used in the adulteration of wines, and whisky is even treated worse. The popular lager beer is adulterated also to an alarming extent, for it is drank freely by so many under belief that it is healthful and cannot be meddled with as are alcoholic beverages. Even drugs—the very drugs used for adulterations—are themselves adulterated, Paris green, for instance, being one.

"It is impossible to estimate the amount of poison people take into their systems daily, and it's no wonder some of us have wrecked constitution," concluded the grumbler, as he finished his toothpick and sauntered out, wearing an expression of enmity to all the world.—[Chicago News.

INSECT ENEMIES.

TREATMENT OF RED SPIDER AND SAN JOSE SCALE.

Full Directions for Making the Best Wash, and How and When to Apply It.

[Written by Matthew Cooke for the RECORD-UNION.]

The following letter has been received from Mrs. D. D. Gammon, Courtland:

What would you recommend, to be applied now, to destroy red spider and San Jose scale? How shall I apply it? Where can the ingredients be had? I sent early this spring to Los Angeles for five barrels of whale-oil soap, and used according to Dr. Chapin. It is quite a job to make this mixture. About two weeks ago I sent for a barrel of whale oil and iron compound, manufactured in San Francisco, which I find to be of no account whatever.

Answer: At this season of the year, when the trees are loaded with fruit and also clothed with a dense foliage, it requires great care in mixing any solution that will be effective, and not destroy the fruit or foliage. I would recommend whale-oil soap, or any good home-made soft soap, eight ounces; sulphur, two ounces; and commercial potash two-thirds of an ounce, with tobacco as directed below to each gallon of water used. I have found by practical experiments that commercial potash is preferable to the caustic soda and potash (concentrated lye), and costs but little more if bought in quantity. By the barrel it costs about eight cents per pound; in fifty-pound packages about eleven cents, and in ten-pound packages about fifteen cents. The fifty and ten pounds are sealed packages.

MIXING THE PREPARATION.

1st. Dissolve a number of pounds of potash in an equal number of gallons of water, in a barrel or other vessel. One quart of this solution will be the quantity required for every six gallons of the solution.

2d. Boil twenty pounds of tobacco stems or cuttings in ten gallons of water, and strain clean into a barrel or other vessel. One quart of this will be the quantity required for every four gallons of the solution.

3d. For the preparation of solutions for destroying insect pests, there should be a boiler or tank on the premises that will hold 100 gallons and upwards.

To prepare 160 gallons of solution, put ninety gallons of water in tank and heat until it boils; to this add 4½ gallons of the potash solution, and 12½ pounds of sulphur; let boil for fifteen minutes; then add fifty pounds of whale-oil soap and 6½ gallons of the tobacco water, and the solution is ready for use.

Remember, to each solution stir well before taking out any portion to mix with the others, and also before taking out of tank for application stir well, so that the sulphur will be well mixed.

THE APPLICATION.

Do not spray the fruit or foliage on very warm days. The solution should be applied through a cyclone nozzle, throwing a very fine spray. This solution, if properly applied, will destroy the young scale insects and red spider, and not injure the fruit or foliage; the sulphur will destroy any fungi that may be on the trees or fruit. The spraying should be repeated as soon as a new hatching of the scale or mites appears. The commercial potash can be bought at any of the leading druggists; the tobacco stems at any of the large cigar factories; the whale-oil soap at Allyne & White's, Nos. 112 and 114 Front street, San Francisco.

WHALE OIL AND IRON COMPOUND.

Another parasite upon the fruit-growing industry is the whale oil and iron compound, and I am very sorry to learn, dear madame, that you are one of the victims of this unmitigated humbug.—the whale oil and iron compound recommended to the fruit-growers of this State as an infallible remedy for the San Jose scale and cottony cushion scale at all seasons of the year; and also that you had to pay for the five barrels of soap you write of nearly double the price that an equally good article could be had for in San Francisco. Under such directions the fruit-growers of this State may well exclaim, "How long, O Lord, how long!"

I respectfully offer the following advice for the treatment of a certain class of ignoramuses that are now at large: First—When any person tries to sell you, or recommends you to buy any certain brand of whale oil soap containing more than six or seven pounds of potash in each 100 pounds of the soap, remember that "time has made the imposture plain." Second—If any person offers to sell, or recommends you to buy a solution for the extermination of insect pests, especially the San Jose scale and cottony cushion scale, that contains one-fourth of a pound of sulphate of iron (copperas) for every one pound of whale oil soap used in such solution, remember that it is in utter ignorance of chemistry that causes a person making such representation to be fearless of the shame that is sure to follow a practical application, as exemplified in your letter.

A GENERAL REPLY.

To the fruit-growers of California, and all whom it may concern: It is impossible for me under existing circumstances to send immediate replies to all inquiries made by letters and otherwise, consequently some letters get mislaid. Between the 6th of April, 1883, and the 23d of April, 1885, I have examined and reported upon over 700 insects, and sent replies to over 1,300 inquiries, besides preparing many newspaper articles. It is also, to say the least, disagreeable to write replies to letters now lying upon my table, which, if answered conscientiously, cannot be considered other than personal concerning parties named therein. However, I will use my best endeavors to assist in the good work which for the time being is partially under a cloud, but this must not be considered a serious calamity. Time will overcome the frailties of the weak, and invigorate the mind to a sense of its duty. The fruit-growers "from Shasta to San Diego, and from the Sierras to the sea," will hear the supplication, "Have patience with me and I will pay thee all." It is to be hoped that progressive action will take the place of past inactivity, and that reliable information, obtained as the results of practical experiments and thorough investigation, will take the place of borrowed information and office-made formulas; and that the mistakes of the past will be well repaid by faithful and intelligent services in the future. It is also to be hoped that when Bulletin No. 3 appears those who lost confidence and their coin by following the directions given in Bulletin No. 2, will be among the admirers of a new progressive policy. There is no person in the State that will be prouder to recognize such a change, and when deserved to bestow the reward, "Well done good and faithful servant" than the writer of this.

The writers of many letters received are referred to the reply to Mrs. D. D. Gammon, above given, for answer to their inquiries. Further replies in relation to Bulletin No. 2—the whale oil and iron compound—will be hereby dispensed with for some time to come.

Ammonia Cheaper than Soap.

Ammonia is cheaper than soap, and cleans everything it touches. A few drops in a kettle that is hard to clean makes grease and stickiness fade away, and robs the work of all its terrors. Let it stand ten minutes before attempting to scrape off, and every corner will be clean. It cleans the sink and penetrates into the drainpipe. Spots, finger marks on paint, disappear under its magical influence, and it is equally effective on floor and oilcloth, though it must be used with care on the latter, or it will injure the polish. There is nothing to equal it in cleaning the silverware, and it gives a higher polish and keeps clean longer than anything else. If the silver be only slightly tarnished, put two tablespoonfuls of ammonia into a quart of hot water, brush the tarnished articles with it and dry with a chamois. If badly discolored, they may need a little whiting previous to the washing. An old nail brush goes into the cracks to polish and brighten. For fine muslin and delicate lace it is invaluable, as it cleans without rubbing the finest fabrics. Put a few drops into your sponge bath in hot weather, and you will be astonished at the result, as it imparts coolness to the skin. Use it to clean hair brushes, and to wash any hair or feathers to be used for beds or pillows. When employed in anything that is not especially soiled, use the waste water afterward for the houseplants that are taken down from their natural position and immersed in the tub of water. Ammonia is a fertilizer, and helps to keep healthy the plants it nourishes. In every way, in fact, ammonia is the housekeeper's friend.—[Exchange.

A Large Clock.

The new clock in the Board of Trade, Chicago, is thus described: "The clock is made of iron, bronze and steel, and weighs ten tons without the bell, which weighs 4,500 pounds more. The pendulum alone weighs 750 pounds. The works, which follow the plan of the great Westminster clock of London, are divided into a time-train, a hand-train and a striking-train. These trains are separate machines, resting side by side, on separate frames. The time-train simply keeps time. The hand-train generates the force that moves the hands on the dials in the tower and in the main hall, and is set off at the proper time by the time-train. The striking-train generates the force that strikes the bell, and, like the hand-train, is set off at the proper time by the time-train. Each of these trains is operated by a separate weight, and the three weights together weigh 3,500. The hammer that strikes the bell was to have weighed 120 pounds, but a patent hammer weighing only 80 pounds has been preferred. The clock-work is below the dials, which are ten feet ten inches in diameter, and the bell is above them, and 250 feet from the ground. The manufacturers of this clock say that the pendulum of the clock in Dr. Tyng's church in New York, which they made, has not stopped since it was started, twenty-five years ago, and that they see no reason why the Chicago pendulum should not vibrate as long or twice as long without interruption. The Chicago pendulum swings one way in two seconds. The manufacturers say also that a somewhat smaller clock which they have on exhibition in New Orleans has not varied a second since last September, and that they will be disappointed if the Chicago clock varies more than a second in a year. The Chicago clock is called, as to size, a movement No. 20, and is the same in size as the clock, made by the same house, in Independence Hall, Philadelphia, and that cost $10,000, though the Chicago clock contains some improvements over the Philadelphia clock."—[American Engineer.

Entertaining His Sister's Beau.

He had called to take his fair ladylove out for a drive, and, after sending up a note to that effect by her brother Johnny, he sat in the parlor waiting for her to come down. After a long time Johnny came back, and, drawing a chair close beside Mr. Evans, he sat down for a talk.

"Say, Mister," he began, "you needn't think sis don't want to go 'cause she is so long gettin' ready. You see, she slapped me this morning, and I'm mad at her, so I've tried to get even."

"Did you not take her the note I gave you?" asked Mr. Evans.

"Oh, yes, I gave it to her, and she got ready in a minit. Now, ma always looks her over when she dresses up, to see if her face is clean and her bangs are on straight; but ma went over to see how Mrs. Brown's baby is, that has the rash, and when Moll came down stairs and asked me how she looked, I told her she was as sweet as maple sugar, only she had a big spot of flour on one side of her face, but if she would come up to the towel I would wipe it off; so when she got to the towel, and stooped over and shut her eyes for me to wipe her face, I took out my slate rag that I was blacking the stove with when you came in, and dusted all over her face the way I've seen ma put paint on. Then I told her I would fix her frizzes a little, so I pulled them over so they only covered about half of the bald spot on top of her head. She was just coming in here when ma came in at the hall-door. As quick as ma got sight of Moll's face she just marched her into the sitting-room bed-room to wash off the blacking. She said she would 'tend to me, and I expect she is about through with sis, so I had better be off. I guess I will go down town. Say, don't tell any of them I've been in here, unless you want to see pieces of my pants flying all over town."

AN EXPERIMENTAL ELECTRIC ROAD IN SAN FRANCISCO.—Within a month it is believed the Pacific Coast Electric Construction Company will have an experimental electric road running from the Southern Pacific depot to the Union Iron Works, at the Presidio, in San Francisco. For some time past experiments have been made in this direction, and the plans are now said to be complete. The road will be similar to the cable road, only, instead of a cable underneath the track, there will be a negative and positive wire. These, when brought together by the grip of the dummy, will complete the circuit and provide the motive power. When the car stops the wires will be released; thus the power necessary to drive the car will be saved while it is at rest. The generating machines are also so arranged that as soon as a car stops they will cease to generate the amount of electricity to propel the car. Should the line become blocked by a procession or other cause, this plan will result in a great saving. There is said to be no limit to the pace at which cars can be run by electricity, and experiments on the electric roads at present existing show that to propel a car conveying forty-four passengers costs only from four to five cents each mile traveled. Should the experimental line prove a success, electricity as a motive power will, no doubt, be adopted on many of the street railroad lines there.—[Electrical Review.

THE MOON'S INFLUENCE.—Those who yet cling to the old time faith in the moon's influence upon the weather may be interested to learn that so eminent a scientist as Sir William Thompson has recently felt called upon to declare that careful observation with the barometer, thermometer and anemometer have failed to establish any such influence; on the contrary, that if there is any dependence of the weather upon the phases of the moon it is only in a degree so light as to be quite imperceptible to ordinary observation. Careful observations in the same direction, made by Dr. Gibbons, of this city, and continued through a series of more than thirty years, fully confirm the statement of Sir William Thompson.—[Mining and Scientific Press, San Francisco.

HUNT'S [Kidney and Liver] Remedy has been used over thirty years, and saved thousands from lingering disease and death.

FOR throat diseases and coughs, use "Brown's Bronchial Troches." Price, 25 cents. Sold only in boxes.

TUTT'S PILLS

25 YEARS IN USE.

The Greatest Medical Triumph of the Age!

SYMPTOMS OF A TORPID LIVER.

Loss of appetite, Bowels costive, Pain in the head, with a dull sensation in the back part, Pain under the shoulder-blade, Fullness after eating, with a disinclination to exertion of body or mind, Irritability of temper, Low spirits, with a feeling of having neglected some duty, Weariness, Dizziness, Fluttering at the Heart, Dots before the eyes, Headache over the right eye, Restlessness, with fitful dreams, Highly colored Urine, and

CONSTIPATION.

TUTT'S PILLS are especially adapted to such cases, one dose effects such a change of feeling as to astonish the sufferer.

They Increase the Appetite, and cause the body to Take on Flesh, thus the system is nourished, and by their Tonic Action on the Digestive Organs, Regular Stools are produced. Price 25c. 44 Murray St., N.Y.

TUTT'S HAIR DYE.

GRAY HAIR OR WHISKERS changed to a GLOSSY BLACK by a single application of this DYE. It imparts a natural color, acts instantaneously. Sold by Druggists, or sent by express on receipt of $1.

Office, 44 Murray St., New York.

HISTORICAL DATA.

Cade's insurrection took place in 1450.

Delft earthenware was first manufactured in 1310.

The trial of Warren Hastings began in 1788 and lasted until 1795.

Cæsarea, the Roman capital of Judea, was built by Herod the Great 10 B. C.

Byzantium was founded by a colony of Megarians, under Byzas, 667 B. C.

The metal called gallium was discovered in 1875 by Lecoq de Boisbandran.

The oldest fable is Jotham's fable of the trees, which was made about 1209 B. C.

The kingdom of Dahomey became known to Europeans early in the last century.

Acts were first employed in dramatic poetry by the Romans. Horace speaks of five acts as a rule.

Palamedes, of Greece, invented backgammon 1224 B. C. It is said to have been invented in Wales before its conquest.

St. Cyr, which was made a military college in 1803, was founded by Madame de Maintenon in 1686, as a college for ladies.

The court office of master of ceremonies was instituted when the Stuart family became the reigning English house, in 1603.

Clerical benefices originated in the twelfth century; before that time the priests were supplied by alms and oblations at mass.

The flag was introduced into Europe by the Saracens. Before their time, the ensigns of war were stretched on cross pieces of wood.

Kaolin, the white clay staple of porcelain, the constituents of which are quartz, mica and feldspar, has recently been found in large quantities in the vicinity of Chattanooga, Tenn., and Birmingham, Ala., discoveries of great value in the future.

MISCELLANEOUS.

PETROLEUM V. NASBY.

D. R. Locke, "Petroleum V. Nasby," editor Toledo *Blade*, writes; "I had on a forefinger of my right hand one of those pleasant pets, a "run-round." The finger became inflamed to a degree unbearable, and swollen to nearly twice its natural size. A friend gave me HENRY'S CARBOLIC SALVE, and in twenty minutes the pain had so much subsided as to give me a fair night's rest, which I had not had before for a week. The inflammation left the finger in a day. I consider it a most valuable article." fe24-1y&w1y

A PERFECT SHOE

FOR LADIES, MISSES AND CHILDREN.

OUR PRODUCTIONS REPRESENT THE PERfection of Shoemaking. Look for our Name on the Soles: J. & T. COUSINS, New York. m8to)6&8tojaIMWThS

TO BREEDERS.

DANTAN,

THE STANDARD DRAFT STALLION will make this season at O'Tool's Ranch, Freeport; Alex. Stevenson's Ranch, Upper Stockton Road, and at Wm. Curtis' Ranch, Lower Stockton Road. Dantan is said to be the most Perfect Draft Horse that ever came to this country. Dark Gray, weighs 1,800 pounds and stands 16½ hands high. mr3-3m WM. CURTIS, Proprietor.

TO BREEDERS OF FINE STOCK.

Season Commences February 1, 1885.

BERLIN,

THE STANDARD TROTTING Stallion, will stand at AGRICULTURAL PARK. Be having taken the premium at the late State Fair, it should insure him a good season. BERLIN is the sire of Thapsin, who trotted as a four-year-old, gaining record of 2:28; Pansy, three-year-old, 2:30½. Adair is half brother to Berlin, record 2:21 at five years old. For particulars inquire of GEO. MARTIN. ap4-3ptf

"LONE FISHERMAN."

THE FINEST FIVE-CENT CIGAR IN THE Market. Also, a fine line of Imported and Key West on hand, at 226 K street. m6-1plm R. H. PETTIT, Proprietor.

AUCTIONS.

AUCTION SALE

—OF—

REAL ESTATE

—AND—

Stock of Groceries, Etc.,

IN THE STORE OF

L. KREUZBERGER, Deceased.

NOTICE IS HEREBY GIVEN THAT IN pursuance of an order of the Superior Court of Sacramento county, State of California, made on April 27, 1885, the undersigned, Executors of the will of LUKAS KREUZBERGER, will, on

Wednesday, May 20, 1885,

At the hour of eleven o'clock A. M., at the door of the Court-house of said county, in Sacramento city, sell at public auction, to the highest and best bidder for cash in U. S. gold coin, all right, title and interest of said LUKAS KREUZBERGER, deceased, at the time of his death, and all right, title and interest which his estate may have acquired since his death, of, in or to the south half (S. ½) of Lot Four (4), in the block bounded by Front and Second, and R and S streets, of Sacramento city, county and State aforesaid, with the improvements thereon, consisting of a Frame Dwelling-house, etc.

And notice is further given, that in pursuance of the same order said Executors will, on the same day, to wit, WEDNESDAY, MAY 20, 1885, at the hour of two o'clock P. M., at the Store known as Number 416 K street, between Fourth and Fifth streets, of said Sacramento city, sell at public auction to the highest and best bidder for cash in U. S. gold coin, the following described personal property: The stock of goods contained in said store, consisting of Groceries, Teas, Coffee, Spices, Woodenware and other Household Supplies, etc. Also, the Stationary Machinery located in said store and used for the grinding and preparation of spices, etc. Also, 2 Coffee Mills, and a Horse, Wagon and Harness. The personal property will be first offered for sale in one lot.

Terms and conditions of the sale of said real property: Ten per cent. of the purchase price in cash in U. S. gold coin on day of sale, and balance in like gold coin on confirmation by said Court and delivery of Executors' deed. Deed at expense of purchaser.

Terms and conditions of sale of personal property: Cash in gold coin on day of sale and immediate delivery of the property.

Sacramento, April 29, 1885.

CHRIS. EHMAN and
GEORGE SERMONET
Executors of the will of Lukas Kreuzberger, deceased.

BEATTY & DENSON, Attorneys for Executors. ap29-td

SHERBURN & SMITH,

GENERAL AUCTIONEERS,

No. 323 K STREET, SACRAMENTO.

At Private Sale,

CHEAP:

1 Detroit Fireproof Safe,
2 New Mosler Fireproof Safes,
1 Hall's Fireproof Safe (large),
1 French Plate Bar Mirror (36x60),
6 Dozen Chromos,
1 Platform Scales,
3 Counter Scales,
2 Office Desks.

APPLY SOON, and GET BARGAINS.

WANTED—LOST—FOUND.

WANTED—ANY INFORMATION OF HENRY HARTZELL, of Cleveland, Ohio, will be thankfully received by his nearly distracted parents. No. 6, West Clinton street, Cleveland, Ohio. m6-3t*

LOST—A GOLD BRACELET ON THE SUNday School Excursion Train or at the Pepot. Finder will please return to 616 J street and be rewarded. m6-1t

WANTED—A YOUNG LADY, JUST ARrived from Chicago, desires a position as Stenographer and Caligraph, or Type Writer Operator. All office work and correspondence a specialty. Address MISS "E. G. B.," Woodland, Yolo county, Cal. m2-1w*

LOST—A DIAMOND SETTING IN GOING from Fifth and K to Seventh and K streets; from there to Lipman's, and from there to Masonic Building. A liberal reward will be paid if returned to SERGEANT BARWICK, Lyon & Curtis' Building. ap29-1f

WANTED—TO PURCHASE OR RENT, a house containing six to eight rooms, and located between Sixth and Twelfth, and G and M streets. Address "H. T.," RECORD-UNION office, stating price, etc. ap13-tf*

WANTED.

2 MEN WHO UNDERSTAND ORCHARD AND vineyard work, good wages; a man cook, $30; a man to iron in a laundry, $30 to $35; a colored man and wife for a ranch, $50; also, man for baling; also, 2 men to milk; a man to do chores, a miller, $20; also, 2 waiters, $30. Female—a girl to polish and iron, $30; a woman cook, $25; also, 6 girls for housework for the city, $15 to $20; also, 4 girls for housework for the country, $15 to $30; a housekeeper, $15. Apply to HOUSTON & CO., Employment Office, Fourth and K streets, Sacramento. ap13-1ptf

FOR SALE—TO LET.

TO LET—DESIRABLE NEW COTtages, situated on south side of L street, between Sixteenth and Seventeenth. Inquire No. 1200 K street. m6-1w*

FOR SALE—A RANCH OF 240 ACRES; 150 Fruit Trees; about 20 acres of Vineyard; known as the "Park Hovey or Bond Ranch," near Roseville. For particulars apply at 1122 H street. m6-1w*

FOR SALE—A FINE STALLION; 5 years old; weighs about 1,200 pounds; inquire of S. K. TREPRY, Agricultural Park. m7-tf

SOMETHING NEW IN PINE SETS—JUST out and for sale at CHAS. M. CAMPBELL'S, 409 K street. Four good Carpets, 1 Buck Stove, 1 Red Lounge cheap for cash. Upholstering and repairing at lowest rates. ap19-tf

TWO LARGE UNFURNISHED ROOMS, SUITable for housekeeping, in alley, Fifth and Sixth, L and M. Also, three rooms, 401 I street. Apply to D. GARDNER, Wood Yard, 401 I street. mr7-tf

Hooker Steam Pumps and Steam Engines

FOR SALE CHEAP FOR CASH.

1 No. 3 4½ inch Cylinder, 6-inch stroke.
1 No. 5 Double Plunger, 6x10 inch.
1 Double Plunger Pump, 10x16 inch.
2 Steam Engines, 12-inch Cylinders, 24 and 30-inch stroke.
1 10 inch Steam Engine.

Apply to SUPERINTENDENT, Murchie Mine, Nevada City, Cal. m16-1plm

Office of the Immigration Associa'n of Northern California, Sacramento, April 6, 1885.

The officers of the above Association are about to publish "THE HOME-SEEKER," a Monthly Journal giving definite information to immigrants as to the resources and advantages offered by the different localities for settlement. This Journal will be placed in the hands of all incoming passengers. There are now from 8,000 to 10,000 people coming into the State each month. A few business advertisements will be inserted. ap7-tf

McCREARY'S

ALL ROLLER

FLOUR MILL

Still Ahead.

OWING TO THEIR PAST SUCCESS, C. McCREARY & CO. have recently added ALL the new and latest Roller Machinery for improving their grade of ROLLER FLOUR. They now guarantee to furnish the Trade the WHITEST AND BEST ROLLER FLOUR IN THE STATE. ap14-4ptf

BAKER & HAMILTON

IMPORTERS AND MANUFACTURERS OF

HARDWARE!

AGRICULTURAL MACHINERY,

BARB WIRE,

CUTLERY,

Guns, Powder, Etc.

m24-4ptf

SACRAMENTO PLANING MILL

MANUFACTURERS OF DOORS, Windows, Blinds, Moldings, Finish Door and Window Frames, Brackets and Turning Stair Work a Specialty.

☞ Corner Front and Q streets, Sacramento.

HARTWELL, HOTCHKISS & STALKER. ap22-4plm

CALIFORNIA LIME CO.,

Nos. 519 and 521 I street, Sacramento,

DEALERS IN THE "STAR" BRAND AND Santa Cruz LIME. Importers of PLASTER, CEMENT, FIRE CLAY, FIRE BRICK, etc.

☞ All orders promptly filled. ☜

J. R. WATSON.....President
H. C. MARKS.....Secretary
H. C. EWING.....[ap24-4plm].....Manager

H. P. OSBORN'S

Wood and Coal Yard, No. 806 I street.

WELLINGTON, SEATTLE, SCOTCH, SPLINT and Ione Coals. Also, Coke, Pine and Oak, Charcoal, Pitch Pine, and Pine Kindling; 4-foot Second-growth Oak and Stove Wood delivered promptly. TELEPHONE, No. 69.

m2-4ptf W. F. OSBORN, Proprietor.

HENRY ECKHARDT,

GUNSMITH, IMPORTER AND Dealer in Spliced Bamboo Fly Rods; Salmon, Trout and Bass Flies and Fish Hooks; Waterproof Silk, Twisted and Braided Silk, Cotton and Linen Lines; Bait Boxes; Trout Baskets and Reels, Chain and Velvet Dog Collars, Spike and Choke Collars; Dog Slips and Leaders. No. 523 K street. Send for Price List on Guns. ap4-

N. EWERS,

HAS REOPENED THE GROCERY