FRUIT PESTS.

THE WAR AGAINST THEM AT LOS ANGELES.

Important Meeting of the Fruit-growers of Los Angeles County for Organization.

A very important meeting of the fruit-growers of Los Angeles county was held at Los Angeles last Saturday, in pursuance of a published call. The necessity for a systematic and persistent effort against the insect pests, which are so seriously and increasingly affecting the fruit products of the State, and which necessity has for years been urged and insisted upon by the RECORD-UNION, has become appreciated by loses already sustained, and the meeting at Los Angeles is the first general movement on the part of any county or locality for a united and aggressive warfare against the destructive enemies of the insect world. It seems strange that any class of intelligent men should need to be urged to act for self-preservation; to the protection of their own property and interests; and yet in the case of fruit-growers—with but limited exceptions—when the damages are apparent on every hand, and the success of remedial measures are assured, the utmost indifference and culpable negligence is manifested. The efforts of a fruit-grower here and there, to overcome the pest invasion, can only be partially successful so long as his neighbors permit their orchards and vineyards to remain as unmolested breeding and recruiting grounds for all insect life. The initial movement, therefore, at Los Angeles, of an entire community engaging unitedly in the common cause against the destructive pests, marks a departure in the line of awakened common sense which should be followed throughout the entire State, and which, if properly carried out, will insure success, and a return of five hundred fold for the trouble and outlay.

WORK OF THE CONVENTION.

The Convention on Saturday was largely attended by the leading fruit-growers from all parts of the county. Hiram Hamilton, of Orange, was elected Chairman, and J. P. Peabody Secretary. The Chair stated the object of the meeting to be to take measures for protection of the fruit interests of the county against the ravages of insect pests. He called especial attention to the white cottony cushion scale, which is doing much damage to citrus trees and fruits, and asked for expression of views upon the work in hand.

E. M. LELONG

Spoke at length, giving his experience and result of his observations. The white cottony cushion scale, he said, first appeared on the old Garey place in Los Angeles, and subsequently spread through various portions of the county. He alluded to the action of the San Gabriel Fruitgrowers' Association, which has been very successful in eradicating the pest, and gave an interesting report of the result of his own experiments. The white scale attacks both the orange and vine, but the method of destruction is different. The wood and leaves of the orange are affected, but the insect does not disturb the fruit, although occasionally the calix is destroyed. One or two bugs on a single tree will in a season produce myriads. The pest is spreading rapidly, and not only are the trees infected, but also the vines, shrubs and even the weeds. The white scale is to be found in the public parks of the city on the grass and trees. It is hardly necessary to discuss remedies. They are known to exist, and it is only a question of dollars and cents with fruitg-rowers. A single spraying is not sufficient to rid an orchard of the pests. It may take a year or more. Bandages are required to keep the insects from crawling up the tree when they are knocked down, and many other precautions are required. The black scale only breeds once a year, while the white scale breeds all the year round. It is possible that the black scale may breed at different periods, but only one brood is raised in a year, while the white scale has a numerous progeny. Of remedies, a mixture of potash, tobacco and coal oil has proved the most satisfactory. There are numberless applications recommended, but many of these, while they kill the insects, greatly injure and even kill the trees.

Mr. Lelong strongly condemned a preparation advocated by the State Inspector of Horticulture, stating it was both injurious to the trees and dangerous to the user. Mr. Lelong stated that recently he had had considerable correspondence with parties in South Africa, where orange-growing has been tried, but proved a failure, owing to the white scale's gaining a footing in the orchards and ruining the trees. They made no use of remedies, and the scale not only destroyed the foliage of the trees, but infested the plants and vines, even devouring the potatoes under ground.

A vigorous and united movement upon the part of the people of Los Angeles he regarded necessary at the present time, and was certain such an effort would be successful.

GEORGE RICE,

Who some time since, as he stated, received a commission as bug inspector from the State Board, spoke of his experience under the old law. He looked up the law, he said, and consulted with Judge Brunson, but found that little could be done. With the assistance of Mr. Lelong the infected trees in the Fisher-Richardson nursery had been kept out of the market, but in one case where he went to an orchard which was badly infected, the owner refused to do anything, and he sent to the State Board for instructions. The reply came that he could use no legal process, as the law then stood, but must depend upon moral suasion. He had observed great recklessness among orchardists, and they even told him they did not care how much the pest spread in their orchards, as they were "fixing up to sell." Mr. Rice said that he was glad that Los Angeles has a Board of Supervisors that were not afraid to enforce the new law. He spoke on the necessity of harmonious action, and stated that a general law is needed to awaken people to their duty. What good would it do if Orange quarantined and Santa Ana did nothing, or if Passadena took vigorous action to eradicate the pest and Los Angeles was indifferent?

DR. O. H. CONGAR

Said he had no faith in the use of the law in such matters. Technicalities would be raised. In his opinion, all laws for the purpose of eradicating the scale would prove a failure. He had more faith in individual efforts. The result of numerous experiments on his own place had been satisfactory, and he thought by pruning, scraping and taking all the other precautions, an orchard could be cleaned at a very moderate expense. He advocated sulphate of lime, through a sprayer, although it left marks upon the fruit. He said that brush and bushes in which birds nest should be destroyed, as they are a means of carrying the scale pest into the orchards. With a simple remedy these evils could be obviated, but if no one does anything no relief will be obtained. All should unite in a general effort of extinction.

JOEL PARKER,

Of Orange, concurred with the last speaker in some respects, but believed that after all a strong law is necessary, and could be enforced. What good is it for one man to clean up his place, when his neighbor refuses to do anything? Let us ascertain the best remedies and methods, and then see that the law is enforced, so as to have the entire section cleansed at the same time.

COUNTY POMOLOGICAL SOCIETY.

Upon motion of Mr. Weile, of Pomona, it was decided to form a County Pomological Society. After the adoption of the motion a discussion took place among several of the members relative to the probable success of the organization, some claiming that in the past the city had been indifferent to the interest of horticultural soieceties, while others thought the city had done its share. It was finally agreed to postpone the formation of a society until April 11th, and a committee, consisting of George Rice, Hiram Hamilton and W. H. Workman, was appointed to draw up a constitution to present at that meeting.

MR. NILES OF LOS ANGELES

Said that but little was being done in the city to rid the trees of insect pests. One horticulturist on San Pedro street was preparing to uproot his trees, as he had tried several remedies unsuccessfully and killed fifty trees. He said the Council would heartily co-operate in any practical meas use in the interest of the fruit-growers. Other Los Angeles fruit-growers expressed their willingness and anxiety to aid in any efforts to get rid of the scale.

At this point the bill passed at the last session of the Legislature was read, and, at the conclusion, Matthew Cooke, who had just arrived in the city, and was present at the Convention, was called upon to address the meeting, and spoke substantially as follows:

REMARKS BY MATTHEW COOKE.

Mr. Chairman and representative horticulturists of Los Angeles county: I appear before you as the representative of the Sacramento RECORD-UNION—a paper that takes great interest in the warfare against the fruit pests. I was called upon to come here on short notice, and have not had an opportunity to read the call for your meeting, nor hear the statements of any of the gentlemen present. However, in regard to the law passed at the last session of the Legislature, and which has just been read by your Secretary, I will say that if properly administered it will be of great service to the enterprising fruit-growers of this State. It is true that the law as passed is not as perfect as it might have been made. It is one of its shortcomings that it might in some cases be made what is commonly termed a "cinch bill." To guard against this the administration of the law must be placed in the hands of fearless men—who will order the orchardists to clean their trees, and insist on the work being done by all—but by no act of theirs to appear as persecutors. I believe that with proper care the administration of the law can be so arranged that everything will be harmonious.

THE LAW WILL TAKE EFFECT

On the 9th day of May next, the portions applying to the transportation of nursery stock within the State and the importation of fruit, etc., from other States and Territories and foreign countries, will then be in force. The portion relating to eradicating the insect pests from orchards will not be in force until April 1, 1866, or in other words, the orchardists have until that time to clear their orchards without a penalty being attached. But I believe it to be the best course for a fruit-grower to pursue, irrespective of the demands of the laws enacted, to eradicate insect pests appearing on his trees, as soon as he discovers them, as procrastination is an expensive experiment. Mr. Chairman, in the past the tillers of the soil have devoted less time to the discussion of matters of interest connected with the industries in which they are engaged than any other class of men. I congratulate the horticulturists of Los Angeles county on their success in sending delegates to such a meeting as this, which, to use a common phrase, is

A STEP IN THE RIGHT DIRECTION.

The capitalists meet in the marts, the merchants and bankers at their respective exchanges, then why should the cultivators of the soil deprive themselves of the benefits that can be derived from such meetings as this, where every opportunity is offered for an interchange of opinion, and where the foundation may be laid for a unity of action for the extermination of such species of injurious insects as infest their property. You have been accustomed to work from daylight in the morning until dark in the evening—in the summer season some sixteen hours for one day's work; while those engaged in the mechanical industries were only required to work ten hours. The line of action you pursued by allowing other people to do your thinking gave you the opportunity of performing the labor necessary, while others availed themselves of securing the profits of your industry. In speaking to you of these matters I wish to be distinctly understood that I do not intend any of my remarks as personal, but merely as a statement of existing facts—as they appear to me.

FINANCIAL PRINCIPLES APPLIED.

Permit me to give you an illustration of my experience with some fruit-growers, in a financial point of view, in comparison with the business man. Were I to go to any business man in Los Angeles and show him where he could invest $5,000 that would return a gain of $5,000 in six months, or at the rate of 200 per cent. per annum, he would have no hesitation in procuring the funds to invest in such an enterprise. On the other hand, if I go to the fruit-grower (it must be remembered there are exceptions), and show him where or how he can invest a sum of money on his premises, in the eradication of of insect pests, which will net returns of at least 200 per cent. per annum, he will decline to take advantage of the information given him. On what grounds? Because he could not get the profits first, to pay the principal afterwards.

You may reasonably make the inquiry, can you offer any proofs that such investments will pay a profit on the capital expended? I will answer by referring you to the expenditure of four thousand dollars at Oak Shade Orchard, near Davisville, Yolo county, in 1884, for the extermination of insect pests. The results: A large increase of the income from choice marketable fruit, suitable for the Eastern market. Mr. Treat, the superintendent of the orchard, will indorse the sentiment: "It pays well to fight the bugs."

PESTS IN LOS ANGELES.

In Los Angeles county there is a large field for work. Last July and August I visited many of the orange groves in this county, and found a majority of them severely infested with the black scale, especially in the vicinity of Los Angeles and that portion of the county located south of the city. It is no exaggeration for me to say that the black smut on the leaves, in some instances, was nearly one quarter of an inch in thickness. Such trees should be cleaned without fail. Within the city limits some orchards or orange groves are infested by the cottony cushion scale, which is the most dangerous of the scale insects. This pest has no particular food-plant. It lives upon all citrus and deciduous trees, plants, shrubs, forest trees and weeds. Its presence on the banks of the irrigating ditches threatens the orange groves of Vernon and other districts south of the city. I am informed that some of the worst infested property is owned by parties who bought the property for building purposes, and are therefore careless as to the presence and spread of this pest. The law should be enforced, and cause them to abate the nuisance at the earliest moment.

CAUTION ABOUT REMEDIES.

Now, my friends, let me advise you concerning remedies which are offered for you to buy, by those who are interested for personal gain, or recommended for selfish motives; do not be deceived by the cry of cheap, which you will find a delusion in many cases. I respectfully call your attention to a public document, to be hereafter known as Bulletin No. 2, issued by the State Inspector of Fruit Pests. (I understand that this remedy is circulated by several thousand circulars and also printed in the biennial report of the State Board of Horticulture.) It is given as a general remedy for all kinds, classes and species of scale-insects usually destroyed by spraying, and, it is said, can be effectually applied at all seasons of the year, especially for the extermination of the cottony cushion scale, and San Jose scale. I consider it my duty to state that I believe, had the State Inspector of Fruit Pests made a practical application of this remedy before issuing Bulletin No. 2, he would not have done such an injustice to the horticulturists of this State, especially those who have already invested in the

WHALE OIL AND IRON COMPOUND.

Mr. Le Long—Mr. Chairman, I will state that I wrote the receipt for the solution referred to at the request of Dr. Chapin, but he changed it to suit himself and therefore spoiled it. I have received these letters (holding up a bunch of letters) from neighbors of Dr. Chapin, asking me for information about the wash and the mixing of it. The only credit he gives me is for the portion that those trying to mix in the coal oil as he has directed will be in great danger of being blown up.

Mr. Cooke—Mr. Chairman, I care not who was the author of the production known as Bulletin No. 2. It should not have been published by a State officer until he had learned its merits by practical investigation.

A delegate—What do you call such a prescription?

Mr. Cooke—Physicians who have hypocondriac patients, usually write out a long prescription, ordering a few drops to be given at certain periods, and at same time remarking that the medicine being very powerful, great care is to be taken so as not to give one drop too much. The medicine when fully compounded for such class of persons, may be only water and chalk. When such prescriptions are handed to a druggist, I understand it is termed a shotgun prescription.

Such a prescription as Bulletin No. 2, although administered under a persuasive policy, will not eradicate the scale bug, especially the cottony cushion scale.

REMEDIES KNOWN TO BE EFFECTIVE.

Mr. Parker—What solution do you recommend?

Mr. Cooke—For the black scale and black smut I would use as follow: Whale oil or other soft-soap, 10 pounds; sulphur, 2½ or 3 pounds; water, 17 gallons; coal oil, 1 gallon. Apply by spraying. If thoroughly used it will destroy the black scale, red scale, soft orange scale, and the cottony cushion scale. The sulphur is only to be used when the black smut is not present. When the sulphur is not used only apply fifteen gallons of water.

A delegate—How do you mix the coal oil with the other ingredients?

Mr. Cooke—In one gallon of water put one-half pound of brown soap, or any other kind of soap; boil until the soap is dissolved. In this pour two gallons of coal oil; then place a pump in the mixtures and pump it through the pump and hose for say two minutes; this will form a cream which will mix freely with water. One gallon and a half of this mixture will be equal to one gallon of coal oil. There is no danger of being blown up in this process.

QUERIES AND REPLIES.

Mr. Rice—I would like to ask Mr. Cooke if the black on the foliage and fruit of the orange and lemon tree is caused by the black scale?

Mr. Cooke—Yes, sir; the black scale, when young, deposits an exudation on the upper side of the foliage and fruit, which, coming in contact with the air, forms a fungus commonly known as black smut. The young of the cottony cushion scale are also the cause of the black smut on trees infested by them.

Dr. Congar—I would like to know if a saturated solution of lime would not answer as an insecticide?

Mr. Cooke—Lime of itself is not an insecticide, as understood in connection with scale insects, but combined with sulphur, by boiling, they form the liver of sulphur, which will prevent some insects from attacking plants, etc.

Mr. Kinney—How much coal oil can be safely used in a gallon of the remedies usually employed?

Mr. Cooke—One-half pint to each gallon will not destroy or injure the foliage, but will destroy the scale insects.

Mr. Parker—What is the best kind of soap to use?

Mr. Cooke—In the application for scale insects it matters little whether the soap is made from whale oil or other greasy matter. In these cases the soap is used to spread the potash (of which the soap is made) and the coal oil over the foliage, etc. But in cases where the solution is to be used against moths and other nocturnal insects, the whale-oil soap is preferable, as it is more fetid and overcomes the odor arising from the tree or fruit, which attracts such insects. Let me say to you that in a warfare against insect pests, in some cases sacrifices have to be made. For instance, ornamental trees may have to be cut down; flower gardens may have to be despoiled for the present; some three years ago my friend McKinlay dug out about one mile and a half of willow wind-brake, which was infesting his orchard with the willow-scale. But you may rest assured in a large majority of cases such sacrifices, when found absolutely necessary, well repay.

W. H. Aitken, Commissioner for California to the World's Fair at New Orleans, and also a member of the State Horticultural Society, who was present, in response to the Chairman's invitation addressed the meeting in relation to the work he has been engaged in, collecting apples, etc., for the World's Fair, and also referred to the devastation he noticed by the peach moth in northern California, and that he was pleased to learn from Mr. Cooke that he had learned its natural history, and had found remedies that would at least prevent its spread.

A delegate—Has this pest been found in the southern portion of the State?

Mr. Cooke—I have not heard of it further south than Fresno.

A delegate—Has there been any account of these discoveries published?

Mr. Cooke—No, sir; but any person writing for information on the subject received a reply containing such information. I devoted considerable time in the investigation of this pest last summer, and concluded that I was only encouraging a systematic imposition on the good nature of the people by furnishing information for nothing for which work the State was paying its thousands in salaries to officers.

Mr. Lelong showed about fifty or sixty letters he had received from Dr. Chapin, and added that if a man were to try the remedies recommended in these bulletins his life would be in danger.

A LETTER TO HORTICULTURISTS.

An Associated Press dispatch was at this point handed to the President, who turned it over to the Secretary to read to the Convention. The dispatch was as follows:

SAN FRANCISCO, March 21st.—S. G. Chapin, State Inspector of Fruit Pests, has written a letter to the fruit-growers of California, in which he calls their attention to the fact that at the last session of the Legislature an Act was passed entitled "an Act to prevent the spreading of fruit and fruit-tree pests and diseases, and to provide for their extirpation." Mr. Chapin invites the fruit-growers of this State to call meetings in their various fruit localities and make selections of suitable persons to act as Quarantine Guardians, as provided by the new law. He adds that on sending the names of these persons to his office at San Jose they will be duly considered and appointments made therefrom.

LOCAL GUARDIANS NOMINATED.

George Rice moved that, in accordance with the State Inspector's suggestions, Local Guardians be nominated for each district.

Mr. Le Long raised the inquiry whether the the State Inspector had the appointment of the Guardians, and Mr. Cooke explained that the Inspector had a right to appoint if the duty was not performed by the State Board.

Mr. Rice's motion was then carried, and the following nominations were made: For Pomona, Charles Weile; Pasadena, B. O. Clark; Orange, A. J. Wood; Tustin, H. K. Snow; San Gabriel, John D. Dobbins; Duarte, H. S. Daniels; Los Angeles, Milton Thomas; Highland Park, George Rice; Vernon, S. McKinley. The districts not represented were requested to send in their nominations to the Secretary.

IN CONCLUSION.

A vote of thanks was unanimously tendered to Mr. Cooke for his address and the information furnished. A vote of thanks was also adopted to the delegates who had come from remote parts of the county, for their attendance, and the Convention adjourned to meet again in three weeks.

The work thus began in Los Angeles county should at once be taken up in a similar manner in every fruit-growing county in the State. Meetings should be held, the new law discussed and understood, and systematic plans adopted and entered upon without delay for the extermination of the insect pests as effectively and quickly as possible.

New Law for Extirpation of Fruit Pests.

The bill passed at the recent session of the Legislature, to aid the fruit-growers in this work, is given in full below. It was approved by the Governor on March 9, 1885, and will not be in effect until the expiration of sixty days from that date:

An Act to prevent the spreading of fruit and fruit-tree pests and diseases, and to provide for their extirpation.

Section 1. It shall be the duty of every owner, possessor, or occupier of an orchard, nursery, or land, where fruit trees are grown within this State, to disinfect all trees grown on such land infested with any insect or insects, or the germs thereof, or infested by any contagious disease known to be injurious to fruit or fruit trees, before the removal of the same from such premises for sale, gift, distribution or transporation. Fruit boxes which have been used for shipping fruit to any destination are hereby required to be disinfected previous to their being again used for any purpose; all boxes returned to any orchard, storeroom, salesroom, or any place used or to be used for storage, shipping, or any other purpose, must be disinfected within three days after their return; and any and all persons failing to comply with the requirements of this section shall be guilty of a misdemeanor. All packages, known as free packages, must be destroyed or disinfected before being again used.

Section 2. It shall be the duty of the owner, lessee or occupier of any orchard within the State to gather all fruit infested by the insects known as the codlin moth, peach moth, red spider, plum weevil and kindred noxious insects, their larvæ or pupæ, which has fallen from the tree or trees, as often as once a week, and dispose of or destroy the same in such a manner as to effectually destroy all such insects, their larvæ or pupæ. It shall be the duty of the Inspector of Fruit Pests, or the Quarantine Guardian, to inspect fruit packages and all trees and plants, cuttings, grafts and scions known or believed to be infested by any insect or insects, or the germs thereof, or their eggs, larvæ or pupæ, injurious to fruit or fruit trees, or infested with any disease liable to spread contagion, imported or brought into this State from any foreign country, or from any of the United States or Territories, and if, upon inspection, such fruit or fruit packages are found to be infested or infected, it shall be a misdemeanor to offer the same for sale, gift, distribution or transportation, unless they shall be first disinfected.

Section 3. Every person shipping fruit trees, scions, cuttings or plants from any orchard, nursery, or other place where they were grown or produced, shall place upon or securely attach to each box, package, or parcel containing such fruit trees, scions, cuttings, or plants, a distinct mark or label, showing the name of the owner or shipper, and the locality where produced. And any person who shall cause to be shipped, transported, or removed from any locality declared by the State Board of Horticulture to be infested with fruit tree or orchard pests, or infested with contagious diseases injurious to trees, plants or fruits, unless the same shall have been previously disinfected, shall be guilty of a misdemeanor. Disinfection shall be to the satisfaction of the State Board of Horticulture, or the Inspector of Fruit Pests. When disinfected, the fact shall be stamped upon each box, package, or separate parcel of fruit trees, scions, cuttings, or plants; and any person who shall cause to be shipped, transported or removed, any such box, parcel, or package, from a quarantine district or locality, not bearing such stamp, shall be guilty of a misdemeanor, and may be punished by fine, as provided by Section 6 of this Act. Any person who shall falsely cause such stamp to be used, or shall imitate or counterfeit any stamp or device used for such purpose, shall be guilty of a misdemeanor.

Section 4. It shall be the special duty of each member of the State Board of Horticulture to see that the provisions of this Act are carried out within his respective horticultural district, and all offenders duly punished.

Section 5. All fruit trees infested by any insect or insects, their germs, larvæ or pupæ, or infected by disease known to be injurious to fruit, or fruit trees, and liable to spread contagion, must be cleaned or disinfected before the first day of April, 1885, and on or before the first day of April of every succeeding year thereafter. All owners or occupants of land on which fruit trees are grown, failing to comply with the provisions of this section, shall be guilty of a misdemeanor, and fined as provided for in section six of this Act. All fruit, packages, trees, plants, cuttings, grafts and scions that shall not be disinfected within twenty-four hours after notice by the Inspector of Fruit Pests, or a duly appointed Quarantine Guardian, or any member of the Board of Horticulture, shall be liable to be proceeded against as a public nuisance.

Section 6. Any person or corporation violating any of the provisions of this Act, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof, be punishable by a fine of not less than $25 nor more than $100 for every offense.

The Negro Dialects.

There are only a few dialect writers of the African lingo in the United States. Most of the dialect writers are regarded by the negroes as caricaturing them. Such they are the quickest to perceive and the readiest to curse most bitterly. A negro's perceptive organs are extremely quick, and personally they are the proudest people on earth. It is a fact not much known to dialect writers that there are seven distinct dialects among the negroes, so that the master of the subject can tell a negro's origin by hearing his speech. They are as follows:

1. Peculiar to the Virginia negroes. Every one of these old white-headed ones has seen and waited on "Jineral Washington." They look upon the rest of the world as divided into three classes: "white gemmens and ladies," "pore white trash," "common niggers." They are as a class the most honorable and trustworthy men and women I have ever known. If you use their lingo to convey the idea of anything low, cunning or mean, if they could get hold of you they would hate you with a most bitter hatred. It would argute a lack of skill as a linguist.

2. The Kentucky dialect, peculiar to Kentucky and Tennessee.

3. The cornfield dialect, peculiar to the commonest and meanest negroes who have never been beyond the limits of the farm.

4. The Congo dialect, peculiar to the pure-blood African and his immediate descendants. The negro clown always excels in this dialect.

5. The Louisiana dialect, peculiar to the negroes who have been in the possession of the French. It is of difficult accent.

6. The river dialect, peculiar to negro boatmen, fishermen, etc., and which cannot be written to any advantage, but which, learned for the stage, would acquire great celebrity.

7. The mulatto, peculiar to the carriage drivers, waiting maids, negro barbers, fiddlers, dancing masters, body servants, preachers and other "distinguished" persons among them. To express any "polite" idea in any other language would give these negroes as great a contempt for the writer as the high-toned high churchman has for the ordinary exhorter.—[Rev. R. H. Adair, in Free Press.

THEY STILL FLAGELLATE.—The Church of the Penitentes, in Santo Domingo, Mexico, a correspondent of the Buffalo *Courier* writes, is 250 years old, and in it flagellation is still practiced by the remnant of the Aztecs that worship there. The day of flagellation is Good Friday. Although the penitentes are all Catholics, all the Catholics are by no means penitentes. Indeed, it is said they are discouraged by the priesthood. They strip their bodies to the waist, and, having provided themselves with scourges, they beat themselves and each other over the shoulders and back with them until the flesh is terribly lacerated. This is done walking in procession, one of their number voluntarily leading and bearing a heavy wooden cross bound to his neck, under which he staggers nearly bent double, his flesh lacerated by the scourges of his followers. Many have died of exhaustion under this penance. If the victim lives to reach the church, the cross is suspended therein, with the bleeding sufferer still bound to it, where he remains until he faints under the loss of blood. The penitent often pays the penalty of his life in this vicarious atonement for his sins.

A SUSPICIOUS M. C.—"What sort of a lady is she who sends me this card?" inquired Congressman Finerty, glancing nervously at the bit of enameled pasteboard. "A tall and handsome young woman, sir," replied the page. "Has she large blue eyes, a straight nose, ripe, pouting lips and a wealth of dark brown tresses?" asked the statesmanlike dynamiter. "I don't remember," answered the page. "With a sort of Joan de Arc or Charlotte Corday expression upon her mobile features?" continued the Honorable Finerty. "Really, I can't say." "And did you observe the stock of a Queen Anne musket protruding from her pocket?" "Upon my word, I don't know what you mean, sir." "I suspect you'd better take the card to Mr. Robinson," said the Fenian leader; "I prefer that all experiments should be made on him. I've a deep-seated conviction that I have no ambition to be cut off in the flower of my youth."—[Chicago News.

THE FIRST OIL WELL.—On August 27, 1884, there was celebrated in one of the western towns of Pennsylvania the 25th anniversary of the first oil well ever drilled. It was sunk near Titusville, and yielded ten barrels a day, the product being then known as rock oil. This was the humble beginning of the business which now employs a vast number of laborers, millions of capital, and exported last year over 500,000,000 gallons of petroleum. No better idea of the world's progress can be gained than by the recollection that coal oil, in itself an immense improvement over all preceding means of illumination, has in twenty-five years come into general use and been superseded by illuminants as far superior to it as it was to the old tallow dip. Gas and the electric light have taken its place in all the cities and towns of any size, and the only hope for the trade lies in either finding or creating further markets for the product abroad.—[Mechanics.

Practical anatomy is taught in some of the schools of New Haven, Conn., by the dissection of dead cats and rabbits.

INTEREST-BEARING NOTES.

A chestnut tree at the foot of Mount Ætna is thought to be the oldest tree in Europe. It is 92 feet in hight and 212 feet in circumference. The trunk is hollow, and two carriages driving abreast can pass through it.—[Philadelphia Record.

Crocodiles are the only reptiles whose nostrils point in the throat behind the palate, instead of directly into the mouth cavity. This enables the crocodile to drown its victim without drowning itself, for by keeping its snout above water it can breathe while its mouth is wide open. [Mf'rs Gazette.

Tobacco plantations in southern Hungary have sustained great damage from the wire-worm. This destructive pest enters the stem of the tobacco plant just above the root and works its way upward to the flowers. Plants thus attacked yield no tobacco, as the leaves turn yellow and very soon all fall off.

It is now proposed to make a tunnel and railway through the Splugen. The project is regarded with great favor by those interested in Lombardian railways, and support is looked for from Bavaria, Wurtemberg and other parts of Germany. The estimated cost of the whole work is about $16,200,000.

The thimble was invented in Amsterdam, Holland, by Nicholas Van Benschoten, who lived about 200 years ago. He made a thimble to protect the finger of his lady-love. At first thimbles were made of iron, but only wealthy women could wear them. The German name for thimble means "finger-hat."

In Switzerland the minnow reaches an altitude of about 7,900 feet above the sea level, according to Mons. V. Fatio, and the miller's thumb one of 7,200 feet. The perch stops at 6,500 feet, and no others pass above 2,000 feet, although the carp, tench, rudd and chub have been successfully introduced at 3,500 to 5,000 feet.

Logwood is obtained from a tree of that name in Central America. The tree is from twenty-five to fifty feet high, and its trunk is crooked and covered with a rough bark. The branches are armed with thorns, and the flowers at the end of the branches have a purplish calyx and light yellow petals. The outer sapwood is yellow, but the inner, which alone is used in dyeing, is of a deep red.

The shell of crustaceans, like the crab and lobster, is periodically cast off, for the animals continue to grow even after they have reached their mature form. This molting is a very remarkable operation. How the lobster can draw its legs from their cases without unjointing or splitting them was long a puzzle. The flesh becomes soft and is drawn through the joints, the wounds thus caused quickly healing.

A New England firm has introduced a new process for galvanizing wire. It is claimed that by this new method a thorough union of the coating with the body of the wire is secured, and that in every case a smooth, firm surface results. Great softness, tensile strength, and uniformity of temper are also said to be obtained in the wire, while the coating itself remains intact after the wire has been tested by severe twisting.

A MONUMENT OF THE PLANT WORLD.—Adanson found trees of the baobab species in Africa which he computed to be 5,150 years old; and DeCandolle has reported the deciduous cypress of Mexico to reach a much greater age. The oldest individual specimen of any species—in fact, the oldest living thing upon the globe—is probably the cypress of Santa Maria del Tule, in the Mexican State of Oaxaca. If estimates of tree ages are to be relied upon, the life of this venerable forest monarch may have spanned the whole period of written history. At last accounts it was still growing, and in 1851, when Humboldt saw it, it measured 42 feet in diameter, 146 feet in circumference, and 286 feet between the extremities of two opposite branches.

A NEW FLAG FOR NORTH CAROLINIANS.—The House of Representatives on Saturday last adopted a design for a new State flag. The design is as follows: A white bar and a red bar run horizontally, the red bar above the white. Near the staff the color is blue to a depth of one-third of the flag. In the center of this blue portion is the coat-of-arms of the State in gold.—[Raleigh News.

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.

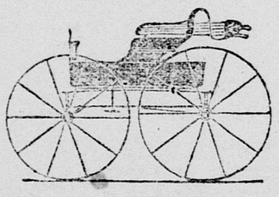
TUTT'S HAIR DYE.

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.

EUREKA CARRIAGE FACTORY,

Standard Works of the Pacific Coast



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From the Mechanics' Fair of San Francisco, and California and Nevada Fairs also.

118 FIRST-CLASS PREMIUMS

FOR THE BEST WORK.

One of my BUGGIES is worth Six Cheap Eastern Buggies.

HARRY BERNARD,

Manufacturer, corner Sixth and L streets,

SACRAMENTO.

I have for sale, at the lowest possible prices: Family Carriages; Open Buggies; Light Top Buggies; Heavy Top Buggies; Farmers' Carriages; Trotting Wagons and Sulkies. Carriage Painting and Trimming, at lowest prices. None but experienced workmen employed. Repairing neatly done. Call at the Factory. Work built to order at the lowest prices. Send your orders. mr10-3plm

KOHLER & CHASE,

SAN FRANCISCO.

HEADQUARTERS FOR BAND INSTRUments and Band Supplies. mr17 3mTuThS&w3m

GENERAL NOTICES.

There is no medicine sold that relieves so much sickness and suffering as Parker's Tonic.

Parker's Hair Balsam saves the hair from decay. fe18 1t8

Mrs. Ames, Midwife. Mrs. Ames cures cancers; 1220 Third street. mr11-1m*

First-class Chinese Servants, Cooks and Waiters. 403 Sutter st., San Francisco. mr21-1m

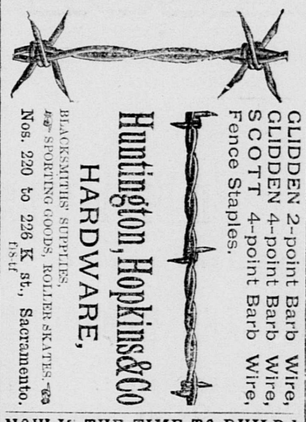
Dr. La Mars' Seminal Pills cure all cases of Seminal Weakness, Nervous Debility, Loss of Mental and Physical Vigor, Impotency, Involuntary Emissions and all disorders caused by Over-indulgence, Indiscretion and Abuse. Dr. La Mars' Pills are no mere Temporary Stimulant, but a completely Restorative Tonic. They build up the whole system, strengthen and restore the sexual organs, and give a new lease of life—with power to enjoy it—to all who experience the blessed benefits of their potent power. Price, $2 50 per bottle. Sent by mail on receipt of price, or by Express, C. O. D. Address all orders, A. McBOYLE & CO., Druggists, San Francisco, P. O. Box 1952. n5-1m

Dedham, Me. To the Liebig Company: Gentlemen—Your agent left me a bottle of your Coca Beef Tonic. I took it myself, as I had been sick for a number of months with a lung affection and was not able to practice. It helped me very much—so much so that I am now about as well as usual. I have since given it to a number of patients, and it has benefited every case. I am indeed most thankful that it came to my hands. I had tried different preparations of Coca before, but had no effects from them. n19-1yWs H. S. PHENIX, M. D.

Advice to Mothers.—Mrs. Winslow's SOOTHING SYRUP should always be used when children are cutting teeth. It relieves the little sufferer at once; it produces natural, quiet sleep by relieving the child from pain, and the little cherub awakes as "bright as a button." It is very pleasant to taste. It soothes the child, softens the gums, allays all pain, relieves wind, regulates the bowels, and is the best known remedy for diarrhea, whether arising from teething or other causes. Twenty-five cents a bottle. fe7-1yMWS

All well regulated families keep a box of Redding's Russia Salve in case of need. o11-1yTuThS

If afflicted with Sore Eyes use Dr. Isaac THOMPSON'S EYE WATER. Druggists sell it at 25 cents. o11-1yS



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Nos. 220 to 226 K St., Sacramento.

GLIDDEN 2-point Barb Wire,
GLIDDEN 4-point Barb Wire,
SCOTT 4-point Barb Wire,
Fence Staples.

NOW IS THE TIME TO BUILD!

Look at this Choice List of

Building Lots

120x160—N. W. cor. 11th & D sts	$1,000
40x160—D st., bet. 10th & 11th (north side)	300
80x160—N st., bet. 18th & 19th (south side)	1,800
80x160—O st., bet. 18th & 19th (north side)	1,550
80x160—O st., bet. 19th & 20th (south side)	1,200
80x160—L st., bet. 19th & 20th (south side)	1,600
80x160—H st., bet. 25th & 26th (north side)	1,250
80x160—P st., bet. 19th & 20th (north side)	1,000
80x160—N. E. cor. 22d & L sts	800
80x160—K st., bet. 15th & 16th (south side)	1,600

This Lot is right in the center of the city, and the STREET CARS will soon pass the door, making it very desirable as a dwelling place. There is money in it also to hold. It will bring double the price in a few years. Will sell 40 feet for $900.

We also have a great many Dwellings for sale at all prices.

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1014 Fourth street, Sacramento. fe18-3plm

FINE

Stock and Grain Farm

FOR SALE!

960 ACRES, FOUR MILES NORTH FROM Anderson, in Shasta County; 500 Acres Good Tillable Land; 200 Acres Heavy Timber, balance Rolling Hills; Living Water enough fo 10,000 Head of Stock. This water control thousands of acres of first-class Grazing Land.

Price, $6 per acre.

W. P. COLEMAN,

REAL ESTATE SALESROOM,

NO. 325 J STREET, SACRAMENTO.

VIRGIN LAND TO LET ON SHARES.

4,000 Acres, in Blocks of 160 Acres and Upwards.

THE SOIL IS OF RICHEST ALLUVIUM, AND will yield enormous crops of grain. The tract is Overflowed Meadow Land, in Sutter county, 13 miles from Marysville and 5 miles from Sacramento river. No river currents and no tule.

Magnificent levees are about completed, which will secure the land from overflow, and it will be leased for coming season on very favorable terms to good tenants. Long leases on shares will be given if desired. Applications should be sent in immediately to GEO. J. SPECHT, Engineer Sutter County Land Company, United States Hotel, Marysville, who will show the land, or to GEO. THEOBALD, JR., Secretary Sutter County Land Company, 419 California street, San Francisco. d12-3ptf

HOTEL AT BLUE CANYON FOR SALE!

SITUATED ON THE LINE OF the C. P. R. R., with 2½ acres of land; 3 Cottages containing 15 rooms; the Hotel proper contains 20 rooms, all furnished. There is also a Woodshed, Barn, Store-room and all necessary conveniences. Apply to SWEETSER & ALSIP, Real Estate Agents, 1015 Fourth street. mr11-3ptf

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