

TODAY, TUESDAY, SEPTEMBER 22 AND ALL THE REST OF THE WEEK GRAND. OPENING. DAY

MULTNOMAH FAIR ASSOCIATION IRVINGTON PARK

LIVESTOCK EXHIBITION and 7 HORSE RACES Rain or Shine ADMISSION 50c GRANDSTAND FREE Races Begin at 2 P. M. No Delays

STREET-CARS FROM ALL PARTS OF THE CITY

SUPERB MUSIC DAILY

FUNGOUS DISEASE IN FRUIT TREES

Read before the Eleventh National Irrigation Congress at Ogden, Utah, by Col. Henry E. Dosch, of Oregon.

Just 40 years ago our mutual friend, Senator Fred J. Kiesel, of your city, and myself, first landed in this valley, after a two months' tramp across the plains, or what was then known as the Great American Desert. Coming out of Emigrant Canyon our eyes feasted on the beautiful fields and gardens which stretched out before us, a veritable oasis in the desert. It was the first Mormon settlement, a picture of peace, happiness, contentment and plenty, which will ever remain green and fresh in our memories, while the surrounding foothills and plateaus were covered with sagebrush and greasewood. There was scarcely any grass that stock could feed upon; the home of the rattlesnake and jackrabbit.

We wondered then what all this country was used for, little dreaming what wealth and plant food was stored away in this parched soil, awaiting the brawn and brain and genius of man, to convert this sagebrush land into grain fields, into fruit-bearing orchards, into vast alfalfa fields, so the sheep, horses and cattle could supplant the jackrabbit and bring affluence and comfort to thousands of happy homes scattered over this vast area, which had only known the tepid and wileup of the Indian.

The subject assigned to me is "Fungus Diseases in Fruit Trees." This would be most interesting at a meeting of fruit-growers, but could not help but be a very "dry" subject at an irrigation convention, and is only applicable in the abstract, as it exists on irrigated and non-irrigated lands. The first thought which arises is "What is fungus?" Webster defines the word "fungus" as a cryptogam, plant, or flowerless plant, one which does not fructify by means usual to others. "A parasitic fungus, as a plant that grows and lives on another, or deriving nourishment from some other living thing."

A fungus (plural fungi) is a low form of plant. It has neither green stems nor leaves and therefore depends for its food upon other plants, or upon animals. Sometimes fungi live upon dead plants or animals or upon their products, and sometimes they live upon other living plants or upon living animals. They are very numerous and differ greatly among themselves in form, structure and habits of life. Fungi sooner or later produce small round or oval bodies called spores. These spores under favorable conditions produce new fungi. They are not destroyed by ordinary weather conditions and often live over winter in fields and orchards. Sometimes they remain alive for several years in the soil and other suitable places, and begin their growth when the conditions are favorable. Many fungi are very small and only to be seen when greatly magnified. These fungi, when once fastened upon their host can only be destroyed, or at least kept in check by persistent spraying. The subject of "What is a host plant?" "What is a fungicide?" "Why should we spray?" "Why should we spray early and late?" "Why is it necessary to spray more than once?" "Why is it necessary to spray every year?" "Will spraying prevent plant disease?" and "Will it pay to spray?" are all pertinent questions and material factors in horticulture, but these subjects are so far reaching and endless that we cannot discuss them at this time.

The study of fungi and fungus diseases therefore is, for many reasons, beyond the field of the ordinary fruitgrower or layman, so far as classification, life history, or remedies are concerned, and we can take up this question, only as it applies to fruit trees on irrigated and non-irrigated land.

The most prevalent of these fungus diseases are "monilia fructigena," infecting the fruit of plum and prune trees; bitter rot, which infects principally the apple and has become so pronounced and defied the best-known spray remedies that in some districts, notably in the East, some

but less water will be required, which is a great factor in regions where water is not plentiful or is expensive, for double the amount of land can be covered than under the old system. Instead of evaporating on shallow soils under the hot sun in all arid regions, the water will percolate down into the storehouses below, to be brought up when needed by capillary attraction and proper cultivation.

That this theory is correct is evidenced by the fact that wherever it has been tried, since I first advocated it some six years ago, it has proven successful. Kindly permit me to quote a very noted case by way of illustration: Mr. David Dunbar, near Vale, Malheur County, Eastern Oregon, had planted an orchard, but it did not do well. The trees grew slowly, were feeble and diseased. After five years of experimenting, his hired man, evidently a progressive fellow, who had read the report I made at that time, suggested dynamiting, which they did, and planted an orchard alongside the old one, and now these latter trees are three times the size of the old ones, are strong, healthy and bear abundant crops of fruit. H. E. Myer, of Boise City, Idaho, who has made experiments in orchards already planted by dynamiting between the rows of trees and near abundant crops of fruit. It also seems to me that dynamiting of soils underlaid by hardpan can not help but be beneficial for grain and alfalfa fields by yielding larger crops for reasons stated above.

Irrigation is as yet not fully understood. The turning on of a lot of water to flood the land is not irrigation in the full sense of the word. People who settle on lands covered by irrigation canals and reservoirs must be educated not only in the use of water, but in the existing soil conditions in order to obtain the best results. I therefore hold that fungus diseases in fruit trees, on arid lands, but especially on irrigated soils, can be largely controlled by placing the top soil and dynamite in an orchard, and bringing both into the condition best adapted to keep the trees in a growing healthy state to resist these fungus attacks, and should perchance some fungus spores find lodgment in an orchard, the spray pump properly applied with the known remedies will soon stamp it out and leave the owner master of the situation.

No man should think for a moment to plant an orchard on any soil, whether in arid or moist regions, until he is fully conversant with all the facts, entering into the requirements as to the health, nourishment and productiveness of the trees about to be planted.

Duff Loses His Damage Suit. In the estate of M. L. Duff, administrator of the estate of James Duff, deceased, against the Willamette Iron & Steel Works, for \$3000 damages, the jury in the State Circuit Court yesterday returned a verdict in favor of the defendant. James Duff was killed by the explosion of a piston-head which he was engaged in shrinking. The piston-head was hollow, and water inside caused it to blow up when it was heated. The defense insisted that Duff and his fellow-workmen were negligent. The trial was begun Friday last.

Gets 37-Year Franchise. NOLTH YAKIMA, Wash., Sept. 21.—At a meeting of the City Council tonight the ordinance granting a 37-year franchise to the Yakima Water, Light & Power Company was passed. There was some opposition to the measure, but five of the seven Councilmen voted for it.

WRECK OF FOYLEDALE

DRAGS ANCHOR AND GOES ASHORE IN VALPARAISO HARBOR.

Captain of Vessel Landed at Portland Loses Wife and Daughter.

In the Chilian Times of Valparaise the wreck of the British bark Foyledale is graphically described. The Foyledale sailed from Portland, March 28, with a cargo of lumber, loaded at the North Pacific Mills. The vessel dragged her anchors and went ashore in the face of a "norther" in Valparaiso harbor June 1.

Most of the crew were saved, but the 4-year-old daughter was lost. The captain and his wife made many friends when in Portland. The horror of the catastrophe was augmented by the darkness, for the gale burst over the vessel at night. George Taylor, of Taylor, Young & Co., agents for the Foyledale, has received copies of the Chilian Times detailing the disaster. The lumber was washed out of the hatchways and was destructive to life and to the rigging in which inmates of the bark took refuge. The captain's wife and daughter were the first victims.

When the vessel was at the mercy of the waves and near the shore the first mate, W. H. Dechre, had the daughter, Ellen Kerry, in his arms, whilst the captain was supporting his wife. An enormous wave dashed over the vessel and knocked the child out of the arms of the mate and the next wave washed him overboard. During this tragic scene the captain was sustaining his wife on deck as well as he could. But not for long amidst the surging of the vessel and the tremendous seas. One terrific wave knocked the couple against the rigging where the captain was caught amongst the ropes; but his poor wife was dashed overboard and drowned. With the blow he then received the captain was rendered unconscious and remained thus in the rigging until he was brought ashore.

The newspaper account says in part: "Being nearest the deck and washed by the furious seas, both captain and his wife were becoming more benumbed, and their strength was fast going. Still the captain retained the hold of his wife with the one arm, and clung to the rigging with the other, whilst the wife in turn did what she could with her slighter strength to assist her husband. But though completely exhausted bodily, she had all her faculties clear, she told him that she must needs drop, so fervently wishing him 'good-by,' they kissed each other and she slipped into the sea. From that moment he lost consciousness, and remembered no more until being taken care of in the San Juan de Dios Hospital. "Up to that time, each man had had enough to do to look after himself, and even yet that was all that could be expected of anyone, for each one in the darkness was almost ignorant of what was happening to any other but his nearest neighbor. "At that moment it was noticed that the wood vomited out of the hatchway almost formed a sort of 'puente' to the shore. At least so some of the sailors conjectured, and rather be more benumbed by the cold, and perhaps ultimately dropped into the sea, they decided to hold their own. The men succeeded in manning to log of wood, or spar to spar, and thus try to scramble to shore. No fewer than four of the men succeeded in managing to reach shore in this way, although in doing so some injured themselves. A fifth, an apprentice, encouraged by the success

MAY TAKE HAND IN FIGHT

O. R. & N. OFFICIALS INVESTIGATE COLUMBIA RATE WAR.

Reluctant to Disturb Traffic by Reductions, but May Find It Necessary for Self-Defense.

O. R. & N. officials are conducting an investigation into the rate war between Columbia River steamboat companies with a view of determining the effect the reduced rates have had upon the railroad's freight and passenger business. The railroad has used its good offices with a view of effecting a compromise and a restoration of rates, but this effort has failed, and the company is now endeavoring to protect its own interests.

TO REPRESENT MINISTER

Chinese Consul-General Will Attend Funeral of San Francisco.

SAN FRANCISCO, Sept. 21.—Leung Hsun, Chinese Consul-General to the Philippine Islands, has arrived here on the steamer Panama, at Honolulu, the Consul-General received a cablegram from the Chinese Minister at Washington, informing him that he had been detailed to represent the Minister at the funeral of Secretary Tom Kim Yung, of the local Consulate, who committed suicide a few days ago. The dispatch further stated Consul-General Leung Hsun was to remain in this city and thoroughly investigate the charge made against the secretary.

Points Out Geographical Curiosity.

BERLIN, Sept. 21.—At today's meeting of the International Statistical Conference M. Levasseur, one of the French delegates, called attention to a geographical curiosity in the case of the extent of the principality of Monaco, which, he said, was given 27 times greater than it really is. Herr Von Mayr, speaking on immigration statistics, said the present system of international statistics was inadequate. He urged that a card be issued for each immigrant, giving full particulars, especially whether the immigrant settled in the country permanently or whether he only remained for a season. Among the delegates of note are Herr Sternag, Austria; M. Bertillon and M. Levasseur, France; Mr. Wilcox, United States, and Messrs. Craigie and Atkinson, Great Britain.

America to Penetrate Abyssinia.

WASHINGTON, Sept. 21.—Under instructions from the State Department, Robert P. Skinner, the American Consul-General at Marseilles, will penetrate the wilds of Abyssinia, guarded by a detachment of American Marines from the European squadron. He goes to negotiate with the King of Abyssinia a commercial treaty which it is hoped will give important advantages to American trade.

Remains of Millionaire at Home.

NEW YORK, Sept. 21.—The body of millionaire Dexter, who was assassinated near his summer home in the Adirondacks, arrived here today. Game poachers and trespassers are believed to be responsible for the crime.

High Speed on Electric Line.

BERLIN, Sept. 21.—A burst of speed, at the rate of 111 miles an hour, was reached Saturday on the Zossen electric line, but over what distance is not disclosed. The length is 18 miles.

An Iowa Philanthropist.

BURLINGTON, Ia., Sept. 21.—P. M. Crapp, founder of Crapp Park, and one of the most extensive contributors to the new public library building, died today.

AUTO GOES OVER GRADE

Wife of a Prominent San Jose Man Fatally Hurt; Five Injured.

SAN JOSE, Cal., Sept. 21.—An automobile containing six persons plunged over an embankment and 15 feet below to the bed of the Guadalupe River late last night, injuring all of the occupants, one of them, Mrs. de Salssett, probably fatally. The party consisted of Mr. and Mrs. Pedro de Salssett, Mr. and Mrs. Peter E. Col, and their son, Lewis, and the chauffeur, William Corliss. Mrs. de Salssett's chief injuries are internal. Mr. Col's left arm was broken in two places and Mrs. Col suffered the fracture of her collar bone. The hurts of the others consist of many but not dangerous bruises.

Death From Exposure.

ROSEBURG, Or., Sept. 21.—(Special.)—At the inquest over the remains of Harmon Snyder, found six miles from Perdue, and near where he disappeared June 16, 1901, it was found that death resulted from natural causes, exposure and exhaustion. The man was weak and evidently became lost in the woods.

Barn Fired by Tramps.

VANCOUVER, Wash., Sept. 21.—(Special.)—A large barn owned by Matt Spurgeon, a farmer living in Fruit Valley, was destroyed by fire this morning. Forty tons of hay and a quantity of farming implements and property was destroyed. The fire is thought to have been caused by tramps.

Supreme Court's Sittings to Resume.

SALEM, Or., Sept. 21.—(Special.)—The Supreme Court will resume work after the Summer vacation tomorrow. At noon the case of A. E. Eaton vs. J. H. Minnaugh, County Clerk of Union County, will be tried. This case involves the Union County county-seat question.

Bridge for Pudding River.

SALEM, Or., Sept. 21.—(Special.)—The Marion County Court has let a contract to C. F. Royal & Son for the construction of a new wagon bridge across Pudding River, near Mount Angel. This bridge has been needed for some time.

Josephine County's Taxes.

SALEM, Or., Sept. 21.—(Special.)—Josephine County today settled its state taxes for 1903 in full by remitting a balance of \$349.

Body Washes Ashore.

NEWPORT, Or., Sept. 21.—The body of an unknown man washed ashore today near Alsea Bay.

Lockout in Effect at Pittsburg.

PITTSBURG, Sept. 21.—The lock-out of the National Association of Marble Dealers took effect in the Pittsburg district today. It is estimated here that 600 men throughout the country are idle.

To Get Free Delivery.

The Woodlawn Push Club will hold a meeting tomorrow night to devise ways and means to secure free delivery for that suburb.

schonner Hattie A. Marsh. The body of Chief Engineer Albert Lingo was recovered today.

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Every day increases the popularity and sale of Carter's Little Liver Pills. The reason is that when once used, relief is sure to follow. Don't forget this.