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,

Senator Fred J. Kiesel, of your city, and be grown successfully and produce marmyself, first landed in this valley, after ketable fruit; the black rot of the grape, myself, first landed in this valley, after a two months' tramp across the plains, or hat was then known as the Great out of Emi grant Canyon our eyes feasted on the beautiful fields and gardens which stretched out before us, a veritable oasis in the devert. It was the first Mormon settlement, a picture of peace, happiness, contentment and plenty, which will ever remain green and fresh in our memories, greasewood. There was scarcely any grass that stock could feed upon; the of the rattlesnake and jackrabbit.

We wondered then what all this coun try was wested 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 ids, so the sheep, horses and cattle uld supplant the Jackrabbit and bring affluence and comfort to thousands of anppy homes scattered over this vast area, which had only known the tepee and wikiup of the Indian

The subject assigned to me is "Fungus Diseases in Froit 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 conven tion, and is only applicable in the abstract, as it exists on irrigated and nonirrigated lands. The first thought which arises is "What is fungus?" Webster defines the word "fungus" as a cryptagamus plant, or floweriess plant, one which does not fructify by means usual to to others. "A parasite fungus, as a plant that grows and lives on another, or deriv ing nourishment from some other living

A fungus (plural fungi) is a low form of plant. It has neither green stems nor leaves and therefore uepends for its food pon 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 babits 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 de-stroyed by ordinary weather conditions and often live over Winter in fields and 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 sub-ject of "What is a host plant?" "What is "Why should we spray? fungicide" a fungicise? Way should we spray?
"Why we should spray early and late."
Why is it necessary to spray more than once?" "How often it is necessary to spray?" "Why is it necessary to spray?" "Will spraying prevent plant disease?" and, "Will it pay to spray," are all perfunct oversitions and are all pertinent questions and subjects are so far reaching and endless that we cannot discuss them at this time therefore is, for many reasons, beyond the field of the ordinary fruitgrowers or layman, so far as classification, life history, or remedies are concerned, and we can take up this question, only as it ap-plies to fruit trees on irrigated and non-

The most prevalent of these fungous dis-eases are "monilla fructigina," infesting the fruit of plum and prune trees; bitter rot, which infects principally the apple and has become so pronounced and defied and has become so pronounced and defied the best-known spray remedles that in lon that if the soil is properly dynamited some districts, notably in the East, some irrigation will not only be more perfect

Utah, by Col. Henry E. Dosch, of Oregon. is perhaps best known, and dead spot, or nthracnose, so deadly to the apple tree, ome of these fungous diseases are more pronounced on trees planted on wet or undrained soils, while others live equally well on dry or wet soils, and again trees planted on soils not properly condition grow slow, become weak and more liable to disease than trees planted on soil suit-

able to their healthy growth, and there-fore in a better condition to resist and throw off diseases. This brings us to the topic most interesting to this convention. The subject of irrigation, or in other words, where the water is controlled by man as needed, rather than depend on the heavens for it, has always had a great fascination for me, and it is not only interesting, but the study of which in its varied phases as applied to plant life is as scientific as any other which enters into the growing of grain or fruit. I therefore halled with delight, while a Commissioner of the Oregon State Board of Horticulture, a request to investigate and report upon the adaptability of the arid region of Eastern Oregon and Idaho to fruit culture under irrigation. Upon visiting that region I found a number of

small plantations, and only one commer-cial orchard, that of the K. S. & D. Fruit Co., near Arcadia, Or., and soon o that there was a noticeable difference in the health and growth of these fruit trees, planted, irrigated and cared for under the same conditions. Here was a problem not readily explained, nor the question aris-ing, "What is the cause?" easily answered, which made it all the more in-teresting. I soon found, however, that some spots in these orchards were wetter than others, and upon these wet spots the trees were more or less diseased. I asked the question whether these we spots received more water than the drier spots, but was assured that the entire plantation was treated alike, which brought me to the conclusion that the trouble lay in the soil itself. I caused

holes to be dug, and very soon came upon hardpan, which I had suspected was all the cause of it. Upon further investigation we discovered that most of the beach land and plateaus of this entire region was underlaid with an undulating stratum of hardpan, impervious to water or roots, I found that the top soil varied from six inches to eight feet in depth, according to the undulation of the hardpan, and the thickness of this stratum of hardpan from three inches to 15 inches. Underneath this harden we found gravelly loam, rich in plant food, but not available on account of this harden. Now, the conclusion I arrived at, and which, after some years of experiments her available acceptance. of experimenting, has proved a correct one, is that the roots of these fruit trees planted in the shallow soil spots soon reached the hardpan, and being unable to penetrate, spread out upon it. These roots not only very soon consume all the available plant food, and in consequence

made them an easy prey of and unable to resist the attacks of fungous diseases. I am inclined to the opinion that these Hardpan conditions exist in all arid regions, for which there is but one remedy ynamiting the soil. It is an easy and in expensive process. Bore a three-inch hole into the hardpan, then insert a stick of dynamite and some powder if found neces-sary, attach a fuse, light it, and the work is done. This will shatter the hardpan for a considerable distance, which permits the roots to go down, prolongs the life of the tree, and makes them healthier and therefore earler to resist fungus dis-ease attacks. I am further of the opin-

stopped growing, starved and became fee

bic, but irrigation, causing these enfec-bled roots to remain constantly in water,

not plentiful or is expensive, for double ate down into the storehouses below, to be brought up when needed by crattraction and proper cultivation.

That this theory is correct is evidenced tried, since I first advocated it some six ears ago, it has proven successful. Kind ly permit me to quote a very noted cas-by way of illustration: Mr. David Dun bar, 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 hear abundant crops of fruit. H. E. Myer, of Boise City, and Chas. H. Anderson of Boise City, Idaho, who have made experiments in orchards already planted by dynamiting between the rows of trees have wrought very beneficial results. It also seems to me that dynamiting of soils underlaid by hardnan can not help but be beneficial for grain and alfalfa fields by yielding larger crops for reasons stated

The turning on of a lot of water to flood the land is not irrigation in the full sense the word implies. 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 re-sults. 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 dynamiting the hardpan subsoil and bring both into the condition best calcu-lated to keep the trees in a growing healthy state to resist these fungus at-tacks, 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 situa

No man should think for a mo 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 Sult. In the suit of M. L. Duff, administrator of the estate of James Duff, deceased, against the Willamette Iron & Steel Works, for \$5000 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 en were negligent. The trial was begun

Gets 37-Year Franchise.

NO. TH 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 op-position to the measure, but five of the seven Councilmen voted for it.

Portage Board Meets Today. SALEM. Or., Sept. 21.-(Special.)-The State Board of Portage Railway Commis meeting in this city tomorrow. The meeting should have been held two weeks ago

Guaranteed to make you sleep-Sch ter's Mait and Mop Tonic, a delicious weather drink. At all druggists.

DRAGS ANCHOR AND GOES ASHORE IN VALPARAISO HARBOR.

Captain of Vessel Londed at Portland Loses Wife and

In the Chillan Times of Valparaise the wreck of the British bark Foyledale is graphically described. The Foyledale sailed from Portland, March 96 with a cargo of lumber, loaded at the North Pa-cific Mills. The vessel dragged her anchors and went ashore in the face of a "norther" in Valparaiso harbor June 1. Captain Kerry was saved, but his wife and 4-year-old daughter were lost. The captain and hig wife made many friends

when in Portland. Most of the crew were also lost. Th corror of the catastrophe was augmented by the darkness, for the gale burst over

of the darkness, for the gaie 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 cap-tain 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 ashere.

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 ust 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 ex-pected of anyone, for each one in the darkness was almost ignorant of what vas happening to any other but his near

When Healy noticed the helpless con dition of the captain, he got hold of the captain, selzed some bunting line which was blowing in the gale, and as the waves were dashing over both, lashed his captain

"At that moment is 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 sallors onjectured, and rather be more benumbed by the cold, and perhaps ultimately dropped into the sea, they decided to beld ly face death at once, and take their chance while sufficient bodily strength remained, of jumping from log of wood to log of wood, or spar to spar, and thus try to scramble to shore. No fewer than four reach shore in this way, although in do-ing so some injured themselves. A fifth, an apprentice, encouraged by the success

of the others also made the attempt, and sild down a rope for that purpose, but he

chance footsteps, then all might have safely reached shore in this fashion. "Daylight by this time was coming in, and as the position of the ship could now be clearly discerned, the rocket apparatus was brought into requisition, and at not go-near the ship. was more successful, and although also wide of the mark one of the sailors on board, at the imminent risk of his life, managed to get hold of the line, but ow-ing to his awkward situation on the rigring, he was compelled to let it go. The hird shot was successful, but it was well on for I o'clock before the block and tackle were properly fixed to the mast, and the guiding lines held by two sections

TO REPRESENT MINISTER

of volunteers, in working order,

Chinese Consul-General Will Attend Funeral of San Franciscan,

SAN FRANCISCO, Sept. 22.-Leung Hsun hinese Consul-General to the Philippin slands, has arrived here on the steamer Pekin. While at Honolulu, the Consul-General received a cablegram from the Chinese Minister at Washington, informing him that he had been detailed to repre-sent the Minister at the funeral of Secretary Tom Kim Yung, of the local Consul-ate, 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 Statistic 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

as 20 times greater than it really is. Herr Von Mayr, speaking on immigra-tion 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 Sternagg, Austria; M. Bertillion and M. Levasseur France; Mr. Wilcox, United States, and Messrs. Craigle and Atkinson, Great

American to Penetrate Abyssinia, WASHINGTON, Sept. 21.-Under in structions from the State Department. Robert P. Skinner, the American Consul-General at Marsellles, will penetrate the wilds of Abyssinia, guarded by a detachent of American Marines from the European squadron. He goes to negotiate with the King of Abyseinia a commercial treaty which it is hoped will give im-

Remains of Millionaire at Home NEW YORK, Sept. 21,-The body of Mil-ionaire Dexter, who was assassinated ear his Summer home in the Adirondacks, arrived here today. Game poachers and trespassers are believed to be respondble for the crime.

High Speed on Electric Line. BERLIN, Sept. 21 .- A burst of speed, a the rate of 114 miles an hour, was reached Saturday on the Zossen electric line, but over want distance is not disclosed. The length is 18 miles,

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

No route across the continent offers so many attractions as does the Denver & Ric Grands. We'te the Pertland Agency, life Third street, for Illustrated booklets.

MAY TAKE HAND IN FIGHT

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

Reluciant to Disturb Traffic by Reductions, but May Find It Nec-

restigation 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 rates, but this effort has failed, and the ompany is now endeavoring to protect

its own interests. It may be safely said that the O. R. & N. will not attempt to reduce rates be-tween Portland and The Dalles if it is ossible to avoid doing so. The compa tions, but cannot allow its interests to be neglected, if an investigation shows that the road will suffer by a continuation of the rate war without some recognition on

the part of the road. The passenger department of the O. R. & N, is strongly inclined to oppose any at-tempt to reduce rates. It has always tak-en the position that it should protect interior merchants against an invasion of their field by outside parties, it is believed that the effect of reducing passenger rates would be to bring hundreds of people from The Dalles and intermediate points into Portland. They would do their shopping here, and merchants of the Columbia River Valley would suffer heavy losses that could not be offset by a reduction in

freight rates.

The officials of the O. R. & N. belleve that the rate wer between the river steam-ers does not have the disastrous effect upon business that would follow an attempt of the railroad to meet water com tempt of the railroad to meet water com-petition. It is likely that this will have a strong effect upon the company and may be a factor influential enough to prevent the passenger department from meeting the water rates.

Freight officials scout the idea of re-ducing their rates, but the matter is under consideration. It is likely that rates will remain unchanged unless the situation becomes more critical. The O. R. & N. officials have not wel-

comed the coming of a rival to the Reg-ulator Line. The company has been able to effect an understanding with the old river fleet owners that, while it gives fair rates to the Columbia River traffic. does not upset business conditions. The coming of a competitor naturally means that the business would have to be cut up again and that the rate question would ever be a disturbing element. For that reason the railroad company has done some work toward discouraging the con-

tinuation of the new line.
Officials of the road have endeavored, n co-operation with business men at The Dalles, to bring about a reconciliation or at least to maintain peace and restore the old rates. These attempts have failed and the company is compelled to choose between retaliating and sitting quietly by until the rate war on the

OGDEN, Utah, Sept. 21.-Details of a fire at Promontory Point, on the Lucien ut-off, have reached here. The fire was started in the coal bins by spontaneous combusion, and the entire bins, with their coal, were destroyed, causing a loss of 10,000. The freight and storage houses

Bodies Those of Men on Lost Ship LEWES, Del., Sept. 21.—The three bodies found here yesterday have been identified as these of the farry Joyes, Joseph Joyes, and probably Captain Mohahey, of the sure to follow. Don't forget this,

the men succeeded in saving them,

and camp houses were twice on fire, but

Fatally Hurt; Five Injured,

SAN JOSE, Cal., Sept. 21 .- An auton blie containing six persons plunged over an embankment and 15 feet below to the of them, Mrs. de Saissett, probably fatally. The party consisted of Mr. and Mrs. Peitro de Saissett, Mr. and Mrs. Peter E. Col, and their son, Lewis, and the chaffeur, William Corliss, Mrs. de Saissett'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. De Salssett is a well-known capitalist.

Death From Exposure.

ROSEBURG, Or., Sept. 21.—(Special.)— At the inquest over the remains of Har-mon Snyder, found six miles from Perdue. and near where he disappeared June 10, natural causes, exposure and exhaustion,

Barn Fired by Tramps.

VANCOUVER, Wash., Sept. 21 .- (Special.)—A large barn owned by Matt Spur-geon, a farmer living in Fruit Valley, was destroyed by fire this morning. tons of hay and a quantity of farming implements and property was destroyed. The

Supreme Court's Sittings to Resume, SALEM, Or., Sept. 21 .- (Special.)-The upreme Court will resume work after the Summer vacation tomorrow. At noon the case of A. E. Eaton vs. J. H. Mimnaugh, County Clerk of Union County, will be tried. This case involves the Union Coun-

Bridge for Pudding River.

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

Josephine County's Taxes.

SALEM, Or., Sept. 21.—(Special.)—Joseph-ne County today settled its state taxes for 1963 in full by remitting a balance of

Body Washes Ashore. NEWPORT, Or., Sept. 21 .- The body of n 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 6900 mer throughout the country are idle.

To Get Free Delivery. The Woodlawn Push Club will hold a neeting tomorrow night to devise ways and means to secure free delivery for

Enthusiastic Welcome to Palma. GUANTENAMO, Cuba, Sept. 21.—Pres-ident Palma arrived today from Santiago and was accorded an enthusiastic welcome by the Nationalists and others.