THE DAILY CAPITAL JOURNAL, SALEM, OREGON, SATURDAY, JAN. 8, 1916.

"Soils of Oregon," Subject **Of An Interesting Lecture** 

The following lecture on "The Soils ed to culture, because of the lack of of Oregon ' was delivered by Prof. these properties. Clay soils are usual-before the Six O'Clock club of the First Methodiat church Tueschy even-ing of this week. Besides a large at tendance from the leading citizens of the eity, many farmers who are inter ested in suil conservation were pres-ent:

By Professor Florian Von Eschen. To discuss the soils of Oregon ade quately seems to me altogether too large an undertaking in the time al-lotted for this numbers Reserves of

The discost the solie of Oregon and in large areas in practically seems to me altogener too important soil leass. The sile is the solie of the solie



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Basin and central Oregon. Legumes.

Basin and central Oregon. Legumes, manure and applications of pottassium in commercial form, give splendid re-sults. This type is one of the best in both western and eastern Oregon for alfalfa growing, providing it has proper drainage. On the dry farming fands, this type is less desirable, but still a productive soil as no leaching has occurred under the semi-arid conditions and the plant food supply, highly available, has been retained. It must be more carefully farmed than the silt leams under these conditions, however, in order to fami-tain fertility. There is a little of this type of soil in

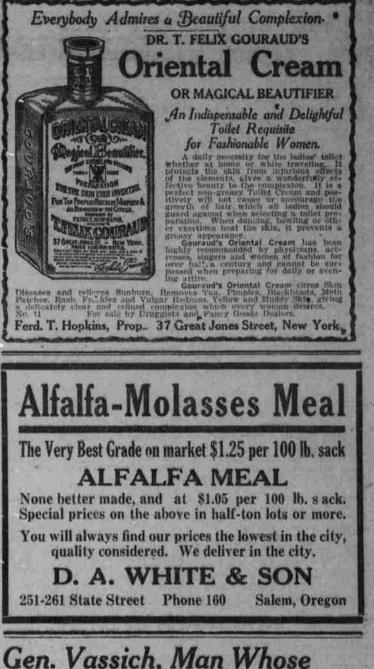
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of neres to as high as a quarter sec-tion in some cases. Many farms in western Oregon, especially those in par-tions of the valleys addacent to the hills, will have a few acros of this type of soil. Probably the largest areas of "sticky" soils are found in the south-ern Oregon division is the Rogne. Riv-er valley and the Umpqua valley. As might be inferred this soil is extreme in nearly all of its qualities. It is very difficult to allow or hundle when wet There is more Catarrh in this section  $\varsigma''$ the country than all other diseases poly ingerlier, and until the last few years areat many years doctors pronounced it a order of the sector of the sector of the present of the sector with local treatment provide later to be a optimized of the sector of the sector of the one hundred dollars for a sec-tor of the one hundred dollars for optimized of the sector of the one hundred dollars for a sec-tor of the one for constitution of the sector of the sector of the sec-tor of the one hundred dollars for a se in nearly all of its qualities. It is very difficult to plow or knadle when wet and equally difficult to put in a goal state of tilth when dry. It does not drain well and warms up slowly in the spring. On the other hand, it is ex-tremely rich in-plant foods, especially in potassium and plosphorus. Practi-cally all of the extreme qualities of this so-called "adobe," which is really a clay, are due to the extraordinarily high percentage of the clay itself con-

ter and root-growth, it soon allows the ter and root-growth, it soon allows the top-soil to become poor and unfertile, and if planted to orchards, the trees ennot get a food-hold and will grow for a few years and then die. The "going back" of orchards in many of the irrigated districts of Oregon, Wash-ington, Idaho, Utah, Colorado and Cali-formis ore due to this sandition and fornin, are due to this condition and will never be remedied until this sub will never be remedied until this sub-soil is broken up. This is somatimes affected by dynamiting the land, or if the layer is not too thick, subsolling sometimes will accomplish the same re-sult. If the hard-pan is acid, the ap-plication of gypsum or ground lime-stone will be of great value. In this valley, especially, and in some other humid parts of Oregon, where the subsoil contains little or no humus, a great many acres have been almost

great many acres have been almost runced because those that cleared the land did not know how to cultivate it. Instead of plowing only three or four inches the first year, and a little deeper each succeeding year until they have attained to a depth of nine or te inches, they plowed to that depth th first year, throwing up a subsoil, poor in humas and available plant food, and as a result, plant growth is limited and the land has to be worked over and over, and humas and fertilizer mixed with it, and even then it requires long exposure to atmospheric action be fore it becomes properly adapted to per form the functions of the surface soil.

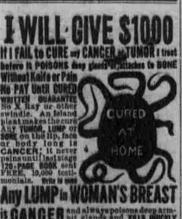
There is one other condition to whic I wish to call your attention before



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ness f elay, Uggether with the extreme immes as fine as one-twenty-five thous andths of an inch, explains its great importance as a physical soil ingredi-ent. It serves to hold together and im-part stability to the flocultent siggre-gates of soil particles that compose a well-tilled soil. Without clay the sand grains as soon as dried and loose till-state enest of the "dry farming" in cast-cause of its remarkable power for mois-ture retention, ense of tillage and avail-ability of plant food. The second class of soils to which I with plant food, are rendered unadoff of the state, in all cases lying immedi-ately and the state, only operation is the same in both to dried soils in water, imparting these important properties to the soil, while often coarse soils, adequately supplied with plant food, are rendered unadapt



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mediately on the const; the flood plains of the rivers throughout the state; old of the rivers throughout the state; old river washes and alluvial fans; the low wind-blown bluffs extending back from the Columbia river; and the great roll-ing plateau lands of central Oregon.

ormer bottom of a great inland sea-

loams obtain. The river flood plains naturally have the richest of these sandy loams mixed of fine sediments, sands and silts vary

cure. Mi-o-na, the famous dyspepsia femedy has helped so many of his customers that Daniel J. Fry says, "If this remedy does not felleve you, come back to my store and I will cheerfully re-turn your money "

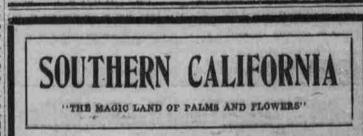
turn arn your money." Anyone who has dyspepsia, indiges-

Anyone who has dyapersia, indiges-tion, hendaches, dizzy feelings or liver troubles, should take advantage of this chance to be made well without any risk of spending their money to no pur-pone. Mi-o-na will relieve you, will regulate the digestion, will enable you to est what you want. If it does not do all this it will not cost you a cent. Daniel J. Fry has sold hundreds of boxes of Mi-o-na in the last few weeks and has yet to receive the first com-The proper statistic of the set of good plant food each of the set of

lonm or gravel and sand for a subcoil, but is a few limited areas there is a little hard-pan. East of the mountains The claim of Edward I. Bradley, an practically all soil, except in a few employe of the Booth-Kelly Lumber limited areas, is underlaid with rock or company who was killed at the Spring-hard-pan. Hard-pan is a dense hardened field plant December 24 was settled to hard-pan. Hard-pan is a dense hardened lawyer of subsoll, impervious to mois-ture and plant food, thus limiting both, formed by the filtration of comenting solutions into a pre-existing material, originally quite similar to that of the surface soil. Being impervious to wa **Safety First Safety First** 

on the head, fracturing his skull.

Klamath Falls: Connty authorities raised the county hounty on deal coy-otes to \$2.75 in the campaign by Ore-gon, t'alifornia, lablo and Nevada an-thorities to stamp out rahies. Covotos in the region of Fort Klamath bring \$4.75 residents of Fort Klamath bring states and an of Fort Klamath bring 45.75 residents of Fort Klamath having pledged \$2 additional for each animal killed. The situation in Klamath com ty was described as not scrious, bu fear is felt flat rabid covates may find refuge in Klamath county from the vigonous sempangin being wages against them in Modoe and in Lak counties, in California. Largest Sale of Any Madicino in the World. Sold everywhere. In hunce, 10c., 25c.



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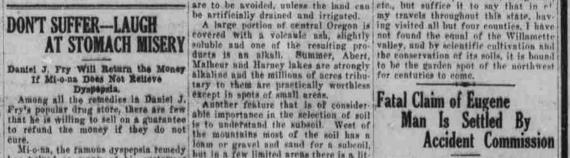
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