

# TO LIGHT TOWN WITH CLUSTERS

### LIVE WIRES TALK OVER THE CHANCES OF CHANGING PRESENT ARC SYSTEM

## ROAD PROBLEM IS THE VITAL ISSUE

### Possibility That Bonds May Be Voted At Early Date Meets With Enthusiasm and Gains Support

Part of Main street may be illuminated by cluster lights if the plans of the Live Wires work out. At the meeting Tuesday noon, the organization discussed the possibility of lighting the street from Sixth to Eighth street with the cluster lamps instead of the present arcs and most of the members were heartily in favor of the step. Many of them said that Oregon City is in this respect somewhat behind the other valley towns and that many cities with a smaller population have already lighted their streets with the new system. Frank Busch and the Portland Railway, Light & Power company are the only business houses in the city with the cluster lamps and these are placed directly in front of the blocks. The Live Wires believe that such a system would not only prove a better means of lighting the main street but would make the town appear much more progressive and up to date.

The possibility of voting a bond issue for good roads at an early date was greeted with enthusiasm by the organization and promises that the measure would receive support were made. The commercial club is heartily in favor of improving the condition of the highways through the county and believes that the only way that such permanent work can be done is through some such systematic effort as is planned.

Following is the menu of the luncheon: Celery, Cold Sliced Ham, Creamed Potatoes, Green Peas, Bread and Butter, Pineapple Jelly, Whipped Cream Cake, Coffee.

# Argentina Is Now Exonerated From Blame For Tango

NEW YORK, Jan. 13.—That the tango is strictly an American dance, and that he had never seen it danced in Argentina, where it is supposed to have originated, was the statement made yesterday by John W. Garrett, American minister to Argentina, on his arrival from Buenos Ayres. He said he had read in Buenos Ayres of the tango as it is danced in New York, and declared that such a dance was never presented in Argentina. Even in Paris Garrett saw nothing that could be compared with the descriptions of the New York version of the tango.

# UNEMPLOYED PINCHED BY SALEM POLICE

SALEM, Or., Jan. 13.—Eleven members of the Johnnies army, which invaded the city Sunday, were arrested this morning, four for eating at restaurant without the price of their meals and seven for begging, and at noon the rest of the army laid siege outside the door of the office of the chief of police demanding food or to be locked up with their mates. As the army shows no indication of moving on the situation is assuming serious aspects today. The men who were given the use of the armory last night announced this morning that they would not move on until they were fed. Last night each was given a potato and three slices of bread. Late this morning they breakfasted on similar rations.

# DEUTSCHE VEREIN HAS ITS PROGRAM

The Deutsche Verein of this city met in regular monthly session, Sunday afternoon at Knapp hall and, after all business was transacted, the following literary and musical program was well rendered. Opening address, Hon. Gustav Schnoor, president; song, "Das Stille Thal," Verein, Mrs. P. J. Winkle, piano accompaniment; vocal duet, "Die Flagge Schwarz, Weiss und Roth," Miss Augusta Hopp, Mr. Albert Hopp; song, "Miss Agnes Pezold;" recitation, Frank Welmer; vocal quartet, "Was Blasen Die Trompeter Husaren Heruas;" Miss Augusta Hopp, Messrs. Ferd and Albert Hopp, Carl Schaudt; address, D. M. Klemesen, vice-president; vocal solo, "Der Empfangsbrief;" Carl Schaudt; closing song, "Andrea Hofer;" Verses. At the close of the program all present partook of a beautiful German dinner.

# ACQUITTAL MEANS EIGHT ENDORSEMENT

### LOS ANGELES, Cal., Jan. 13.—Jesse Willard, the heavyweight pugilist on trial charged with prizefighting, was acquitted by the jury today after it had deliberated all night. The charge was the result of the death of John Young, after a bout at the Vernon Arena with Willard on August 22.

By its verdict the jury sanctioned boxing contests such as have been conducted in this state since the prizefighting statute was amended in 1909. Ford, deputy district attorney who prosecuted Willard, asked for a verdict which would prevent all ring contests where the intention to deliver a knockout blow was obvious. When the jury's verdict was read the prosecutor's only comment was: "You cannot legislate ahead of public opinion." The verdict clears the way for the matches at Vernon arena which already have been carded.

# SANDY GETS FIRST SNOW; TWO INCHES

SANDY, Or., Jan. 10.—Snow fell here Thursday afternoon and night, and Friday morning there was two inches of snow on the ground, which remained during the greater part of the day. This is the first snow here this winter that has remained on the ground at all. A year ago next week there was about eight inches of snow on the ground, which remained for several days. Mrs. Henry Mills gave an "at home" Thursday afternoon in honor of her daughter, Mrs. Nellie Sherwood, of Elensburg, Wash., who, with her three small children, are spending a couple of weeks here. Refreshments were served. Those present were: Mrs. Henry Mills, Mrs. Nellie Sherwood, Mrs. Ernest M. Smith, Mrs. W. H. Barendrick, Mrs. Fred E. Beckwith, Mrs. Ronald E. Esson, Mrs. William Shaner, Mrs. C. D. Purbell, Mrs. Blanche R. Shelley and Mrs. Robert S. Smith.

# SCIENTIFIC MATING IS BAD DOCTRINE

BATTLE CREEK, Mich., Jan. 12.—A majority of members of the executive committee at the National Race Betterment conference here made it clear in interviews today that when the committee announces its conclusions next month it will reject as unsound the policy of breeding a race of thoroughbreds by mating eugenically perfect men and women.

# MCCOLLOCK APPOINTMENT IS HELD ILLEGAL BY COURT

SALEM, Or., Jan. 13.—The employment of Senator Claude McCulloch by Corporation Commissioner R. A. Watson as legal assistant in the corporation department was held illegal and the state treasurer acted properly in refusing to pay the senator's salary warrant, according to an opinion of the supreme court handed down today. The court upholds every contention made by the state treasurer and incidentally Justice Burnett, who wrote the opinion, lays Commissioner Watson for attempting to employ legal assistance.

# FIRST MILL MANAGER DIES IN NEW YORK

Henry Smith, the first manager of the Willamette Pulp & Paper company in Oregon City, died at his home on Fifth Avenue, New York City, on January 8, according to information that has been received by J. H. Walker and other friends here. From 1891 to 1895, he was in charge of the plant in the city and built some of the buildings now owned by the mill. He was a member of Multnomah lodge number one A. F. & M. and Clackamas chapter of Royal Arch Masons. He is 51 years of age and is survived by his widow, a daughter, Mrs. Harriett Abernethy, and two grand children. His wife is the niece of ex-Governor Flower of New York and President Schley of the New York Central railroad.

The funeral services were held from the residence, 611 Fifth Avenue, Saturday, January 10, interment being made in New York. He has a great many friends in the city and through the county and took a prominent part in affairs while he was connected with the mill. LESS BOWEL TROUBLE IN OREGON CITY Oregon City people have found out that a SINGLE DOSE of simple buckhorn bark, glycerine, etc., as compounded in Adler-ka, the German bowel and stomach remedy, relieves constipation, secures stomach or gas on the stomach INSTANTLY. This simple mixture became famous by curing appendicitis and it draws off a surprising amount of old food matter from the Co.

# WEST PEEVED AT DISTRICT JUDGES

### TAKES STEPS AGAINST THE COURTS WHO HAVE NOT HEARD LIQUOR CASES

## SPECIAL PROSECUTOR IS APPOINTED

Portland, Jan. 13.—Because District Judges Jones, Bell and Dayton have dismissed cases brought against saloonkeepers by Sheriff Tom Word in his effort to stop gambling in the city, Governor West this morning took steps which may result in the removal of the judges providing they continue to throw out of their courts such cases as have been brought at the instance of the Sheriff. At the request of the governor, District Attorney Evans this morning permitted Deputy District Attorney Charles W. Robinson to act as Governor West's special prosecutor in a test case to be brought before Circuit Judge McGinn to decide whether the district judges have acted properly in dismissing the gambling cases. Mr. Robinson has handled most of the gambling cases for which Sheriff Word procured evidence. According to Robinson, there has been only one chief contention. That centered about the word "gambling," when he plays cards or other games for cigars, drinks or credit checks.

"So far as I can see, that is the one ground on which they have thrown out cases," said Mr. Robinson. "We have brought in chips and cards as evidence, and testimony has been given by players who said they were gaming for cigars, drinks, or checks. I can only point to the wording of the statute under which the complaints were drawn to show how the word 'gambling' is construed in Act No. 2105, Lord's Oregon Law of 1878."

# GIVES WATER FRONT FOR PUBLIC DOCK

EUGENE, Ore., Jan. 13.—Geo. Melvin Miller, a pioneer realty dealer of Eugene, and owning much property at Florence and vicinity, has deeded half a mile of waterfront land at Florence to the Port of Siuslaw commission for public docks. In the deed there is a clause which specifies that railroad tracks laid on the property must be for the use of any other company that might build its lines to Florence, that no charges for dockage shall be made except enough to pay operating expenses, up-keep and insurance, that no lease shall be made on the property conveyed for a period longer than 10 years and that all revenue received from rents, leases, storage or otherwise in connection with the property in excess of the actual operating expenses shall be applied to permanent improvements.

The Port of Siuslaw has agreed to issue an additional \$100,000 bonds and it is expected that the government will duplicate this sum as it did when the first bonds were issued. The money will be used for the extension of the jetty at the mouth of the river four miles below Florence. The water over the bar has materially deepened during the past year or two, due to the construction of the jetty, it is claimed. At half tide a few days ago when the gasoline schooner Patsy crossed, the water was 18 feet deep.

# COURT MUST DRAW LIST OF JURORS

SALEM, Or., Jan. 13.—It is the duty of the county commissioners of Multnomah county to prepare the list for the grand and trial jurors and the supreme court today issued a peremptory writ of mandamus directing them to do it. This decision of the court was reached in the case brought by the state, ex rel. Walter H. Evans as district attorney, against the board of county commissioners. The commissioners had refused to make up the jury list on the ground that the law raising the county judge to a position on the circuit bench carried with it the authority of making up the list. The supreme court held that long usage has construed section 12 of article 7 of the constitution to impose this duty on the county court, as composed of a judge and two commissioners, and that the duty is not judicial, but is a part of the county's business.

# WORKMEN FISH OUT GIRL FROM RIVER

ALBANY, Ore., Jan. 9.—Climbing to the top railing, nearly in the middle of the steel bridge here, Hazel Hewitt, aged 26, a waitress, attempted to commit suicide by jumping 75 feet into the Willamette river. Dependancy over ill health is given as the reason. Hitting the water face downward the girl remained beneath the surface for a few seconds, and then, because of heavy clothing and a heavy overcoat, she floated in the rapid current under water, with her head and legs workmen and hurried to St. Mary's hospital. She was revived and physicians say will recover. Miss Hewitt is the daughter of Mrs. A. Ward of this city, formerly of Benton county. The girl came here three months ago from Corvallis. It is said she was married to a man named Ridgeway, but that they have separated, and his name was known here under her maiden name. But if a girl is inclined to be a blonde she will be in spite of every-

# TO BUILD TRUNK LINES OF ROADS

### SUBMIT MATTER TO THE PEOPLE FOR DETERMINATION AT SPECIAL ELECTION

## OFTEN CONDITION IS NOTICED

Most Impressive Fact is the Large Number of Mud Holes and Ruts Where Wagons of Farmers May Stick Six hundred thousand dollars for good roads! Throughout the county agitation has been for a bond issue for \$500,000 with which to build 100 miles of hard surfaced highways. To this main trunk line, feeders will later be built, under the plan, to all sections of the county. The scheme includes a regular network of hard surface roads to all parts of the county but it is not expected that more than the 100 miles can at first be constructed for the main line.

Make Some Start. The idea with the boosters for the plan is that the county ought to make some definite start. Something ought to be done, they think, to alleviate the road condition and to change the present mud holes and sloughs into roads of winter. The vast sums of money that are spent in this county every year for road work for which nothing is gained is one of the arguments that has been used in placing this matter before the people. The committee in the office of the county clerk show that more than one million dollars has been spent in the past five years for the county roads. The fact that the roads now are in as bad condition as they have been for any time during the past few years leads the workers to believe that the only way out of the dilemma is to construct trunk lines through the most strategic points.

Later Buld Feeders. Upon the \$500,000 valuation of the county, the bonds could be authorized for \$500,000. With this amount of money in the hands of a capable road engineer who knew his business, the promoters think that 100 miles of hard road could be constructed and that the first step would be taken in getting some real roads in the county. No one who has travelled to any extent over the county highways will over call the present affairs roads in the true sense of the word, they argue, and they think that the time has come when something should be done that would give the people some adequate return for the money invested.

Vast Sums Spent. The appalling sums of money that the county plans to put upon the highways this year and the little change there is for any good work being done has brought about the determination to get this matter submitted to the people. In the general and special levies that have been made, this county will spend \$213,560 for roads this year. That money will fall like a drop in the bucket on the roads and the only evidence that the taxpayers will have of the work done is the receipted bills in the office of the county clerk.

Others Are Progressive. So many of the other counties of the state have taken progressive steps along this line that the boosters of the plan think Clackamas ought to wake up and do something for its roads. Marion, Clatsop, Jackson and Multnomah have already determined upon a regular program of hard surfaced roads. Through the commercial club of Salem a plan is being worked out by which Marion county will have the chance to vote on a bond issue for \$500,000 for its highways this year.

In the past five years, the county has spent \$1,000,000 on roads. This year it will spend \$213,560. None of this money has done the roads any good. The committee believe that the county would save a vast amount of money if a large bond issue were authorized and a definite road program worked out. They think that the taxpayers could be saved a greater proportion of that \$213,560 and that the county could still provide for its interest and sinking fund to handle the bonds that had been issued.

# CUT TRAINING PERIOD FOR CHANGE

PORTLAND, Jan. 12.—From the present outlook the Portland team will not put in as long a period of training at Santa Maria as has been the custom for the last few years. The arrangement of the calendar for the present year, with the early opening of the season, which takes place on March 21, is responsible for this decision. Five Sunday are included in March this year, and as the first one comes on the first day of the month, it does not seem feasible to attempt to play a game on this early date. For the last two or three years the party leaving Portland embarked during the middle of the week, getting to the trainer grounds in time to play some sort of a Sunday game. If the present plans are carried out this system will be changed and the players will leave here either on the last day of February or on Sunday, March 1. This will bring them into Santa Maria on Wednesday, and give the majority of the players time to report for the first game of the season, which will be with the Santa Maria team on March 8.

By this time there will be enough men on hand to make up a regular team and also give the players a chance to work some of the soreness out of their muscles before taking part in a regular contest. COLTON BEATS MOLALLA COLTON, Ore., Jan. 12.—The Colton Navy and Gold quintet journeyed to Molalla Saturday evening, and for the third consecutive time this season defeated the heavy Molalla Giants, 39 to 16. Speed and superior team work of the lighter Colton team was the feature of the game.

# HANDS TED BY RULING OF COURT

### PROTESTING TAXPAYER WINS IN FIGHTS AGAINST LEVY MADE FOR SCHOOLS

## BOARD MEETING IS HELD ILLEGAL

One Member Not Notified of Plans of Others—Tax Made Was Not Needed and Treasury Was Already Full J. E. Jack, county assessor, was restrained by an order of the circuit court Tuesday from delivering to the city of Willamette its tax roll for the year that the seven mill school levy might be collected. The suit was brought by E. O. Levens, one of the heaviest taxpayers of the city, against the assessor, alleging that the school board meeting held in Willamette was illegal and that the levy made was unnecessary and extravagant. He claimed, in his complaint, that only two members of the board had been notified of the meeting and that the vote to call the mass meeting of the taxpayers was taken at an illegal session of the board.

He contended that, because the school board meeting was not properly held and that all of the members had not been notified, the decision to make the special levy was void. He pointed out that the schools require but \$7200 annually for their maintenance and that the board already had \$7312.97 and would receive from the state and county \$1800 more. The tax levy that was made would raise \$9185.65 that he said the schools could not use and that if it did not use would be extravagantly spent.

The court heard the case Tuesday morning and the demurrer that had been interposed was overruled and judgment given to the plaintiff. Dimick & Dimick and Clarence L. Eaton represented the plaintiff while Gilbert L. Hedges appeared for the county assessor.

# ARMY'S HEAD HAS FOUR NEW IDEAS

WASHINGTON, Jan. 13.—Four steps of vital importance, essential to place the United States Army in a state of reasonable preparedness for possible war, were recommended to Secretary Garrison today by Major Leonard Wood in his last annual report as chief of staff. General Wood proposed:

First—Establishment of a reserve of trained men sufficient to bring the regular army immediately to full statutory strength and to replace the losses of the first three months of war. Second—Prompt provision of the remaining 42 per cent of the field artillery project, including guns as yet unprovided for and the necessary ammunition for those now made or under manufacture. Third—Creation of the necessary organizations to give three complete tactical infantry divisions within the continental limits of the United States. Fourth—Enactment of such personnel legislation as will eliminate effectively the unfit and stimulate the efficient officer to continued efforts through establishing a condition under which progress in rank and command will have a close and dependent relationship on capacity, fitness and accomplishment.

# FALSE STATEMENTS APPEAR IN TRIAL

Misrepresentations formed the basis of the defense in the suit on a contract brought before Justice John S. Seivers Monday by Straight & Salisbury against Fred Clark. According to the testimony, Dr. Adams of Portland traded some property to the defendant representing that the cost of plumbing work then under way would be \$40. It afterwards developed that the bill for the work was for \$55. The defendant paid the original amount and refused to add to that sum. The jury held in view of the statements that had been made to him that an additional payment was not necessary. A verdict was found for the defendant.

# THOMAS MULLIGAN DIES AT 82 YEARS

Thomas Mulligan, father of Mrs. John G. Finucane, died at the Finucane home, 1101 16th street in this city, Sunday afternoon in his eighty-second year, after a short illness. Mr. Mulligan was born in County South Ireland, where in 1851 he was married to Miss Mary Martin, to whom six children were born, Mrs. John G. Finucane, Oregon City; Mrs. Mary Smith, Chicago, Ill.; and Mrs. T. J. Holahan, deceased, Omaha, Neb.; Mrs. Anna Alice Finucane, deceased, Chicago; Messrs. James Mulligan, London, England, and P. J. Mulligan, Alaska. Mr. Mulligan came with his family to the United States in 1882, settling in Chicago, where he engaged in the business of a general contractor, and where his wife died in 1905. Here he remained until 1909, when he came to Oregon City, where he invested liberally in city property, making his home with his son-in-law and daughter, Mr. and Mrs. Finucane. During his residence in this city Mr. Mulligan had made a host of friends, and he will be fondly remembered as a bright and genial old gentleman whose loss will be greatly felt by all who knew him. Funeral arrangements will be announced hereafter. Being the friend of a "good fellow" is an expensive job.

# PARENTS INTERESTED IN WORK OF SCHOOLS

### Parent-Teachers' associations' are springing up through all the districts of the county and have lately received a decided impetus by the visit of Prof. M. S. Pittman of the state normal school.

Prof. J. E. Calavan, county superintendent, has worked with the normal director for the past few days in the county and has watched the interest that he has aroused in the workings of the organization as he has told the parents of the many ways by which they can become of use to the schools and co-operate with the teachers.

The organization at Springwater is planning a meeting on next Friday. It will discuss "The Value of the School to the Community," "The Necessity of a New School," "The School Grounds and a Standard School," and "The Results of Play as Well as Work as Shown by Later Life." In the Union Hill district, a new association will be organized on the same date. The interest among the parents is keen in the district and the superintendent believes that he is going to have one of the best associations in the county. The state department is co-operating with the county superintendents in awaking this interest among the parents and has sent out letters of all sorts that may be used to advantage in awaking the good will of the district to the importance of such associations and the meetings that are held.

# STEAMER HITS ROCK; APPEALS FOR HELP

HALIFAX, N. S., Jan. 13.—Groping her way toward St. John, N. B., through blinding snowstorm, the Royal Mail steamer Cobeguid struck on a ledge early today. After sending out wireless apparatus apparently failed and it has not been possible to restore communication with her. She is said to have 150 persons on board including a crew of 75. It was first reported that the steamer was ashore off Brier Island, on the east side of the bay, but the light-house keeper later reported that she could not locate her. It was then believed she might be on one of the ledges at the western entrance to the bay. The Cobeguid got off her course when bound from the West Indies and Bermuda for St. John, N. B. Reports received here state that the steamer reported that her forward hold was filled with water, and that she was listing badly.

# TARIFF CUTS COST OF WOOLEN GOODS

NEW YORK, Jan. 13.—Material reductions in the wholesale price of staple woolen goods for the fall of 1914 were announced in the trade today. The cut is understood to be a direct result of the new tariff schedules and anticipated competition from abroad. Prices of serges, clays, unfinished worsteds and French wools are 20 to 27 cents below last fall. Clay shows reductions of 20 to 27 cents. Unfinished worsted are 22 1/2 to 27 1/2 cents lower. The heaviest reduction, nearly 23 per cent, is on Washington serge.

# CLUB AID IS APPRECIATED

OREGON STATE COMMISSION THANKS ORGANIZATION FOR EFFORTS IT MADE

GAVE IN VERY VALUABLE ASSISTANCE Delegation of Secretary Meant Vast Difference in Appearance of Exhibit At Eastern Land Shows

The Oregon City Commercial club received a special vote of thanks from the Oregon State Immigration commission for the work that had been done in assisting the preparation of an exhibit for the Chicago Land show. Secretary Freytag was placed in charge of the work that the club did at that time and spent a large proportion of his energy for the few weeks before the show getting a suitable exhibit for the county and assisting in arranging and displaying the entire state exhibit. For the assistance that was given at that time, the commission passed the following resolution: "Whereas the Oregon City Commercial club, Oregon City, Oregon furnished a valuable part of the splendid exhibit material and offered invaluable assistance to the efforts of the State Immigration commission to assemble and install a creditable exhibit for the state of Oregon at the Chicago Land show and the International Dry Farming congress, and therefore,

"Be It Resolved, that at this special meeting of the Oregon State Immigration commission held January 2, the members of said commission do express and record their appreciation to the Oregon City Commercial club for the splendid and effective cooperation and assistance rendered."

# ARE POWERLESS TO MAKE RATES

### FEDERAL COURT GRANTS ORDER RESTRAINING CITY FROM CUTTING CHARGES

## EXCLUSIVELY COMMISSION'S RIGHT

All Towns Prohibited From Laying Limits Over Which Companies May not go in Price of Fare or Supplies

PORTLAND, Ore., Jan. 12.—Portland and every other city of the state of Oregon are absolutely shorn of all power to say what the people there of shall pay for streetcar fare, for gas, for electricity or for any public service which they use. Such matters are all within the exclusive powers of the State Railroad commission under the public utilities act. Such is the effect of the decree handed down by United States Circuit Judge R. S. Bean this morning in granting an injunction against the city of Portland's enforcement of the six-for-quarter carfare ordinance passed some weeks ago. It is the first time the public utilities act of the state has been put to a test, and the ruling of Judge Bean upheld the contention of the Portland Railway, Light & Power company through and through. The decision merely applies to the ordinance, but Judge Bean's interpretation of the law as raised in effect, that inasmuch as all the people of the entire state had declared what shall be the law regarding the regulation of public utilities throughout the entire state, no smaller group of people has the legal right to change that law by an amendment of a charter. He held that the public utilities act having been made a law through referendum by the majority of the voters of the state, the city council of Portland could not render the act imperative by any local charter amendment.

The only loophole the city apparently has is to appeal from the decision of the United States court here and carry the issue up to the United States supreme court, or else start the proper machinery to work to get the question of law fares before the State Railroad commission for settlement.

# Divine Sarah At Last Gets Coveted Ribbon of Honor

NEW YORK, Jan. 13.—From Paris comes the news that at last the name of Sarah Bernhardt has been added to the roll of fame of the Legion of Honor. Her claims have been put forward several times before, but the influence of a strong element in French society prevented the actress from obtaining the decoration. Among the famous women who are possessors of the red ribbon are Adolina Patti, Mme. Curie and Baroness de Rothschild, Mme. Paquin and Mrs. Ina Ina, the aviator.

# WIFE IN HER COMPLAINT SAYS HUSBAND IS CRUEL

Cruelty and inhuman treatment formed the basis of the complaint brought in the circuit court Tuesday by Dollis F. Quinn against Charles A. Quinn. The plaintiff recites that they were married at Portland March 29, 1913. Emma L. Delaney brought suit against her husband, William J. Delaney, on the ground of desertion. They were married at Vancouver, W. V., September 13, 1913. Jacob Gallus, brought a divorce action against Wilhelmina Gallus. They were married in Esslinger, Germany, March 29, 1909. The complaint charges desertion as the cause of action.

# WOOD ASHES GOOD AS A FERTILIZER

OREGON AGRICULTURAL COLLEGE, CORVALLIS, Ore., Jan. 12.—Common hard wood ashes have a value of about \$5 in plant food, and \$3.50 in lime, according to investigations made by Professor H. V. Tartar, agricultural chemist of the Oregon Agricultural college. Their physical effect on the packed and acid soils of certain districts is also very beneficial. The almost prohibitive high price of lime to correct soil acidity should lead the Willamette valley farmer to use ashes extensively for that purpose. "Wood ashes are valuable fertilizers for three reasons," Professor Tartar said. "For the valuable plant foods they contain, for their effect in neutralizing acids in soils, and for their action on the physical properties of the soil. "The plant foods in ashes are potash, phosphorus and lime. An analysis of 87 samples of hard wood ashes gave the amount of each as follows: Potash, 110 pounds per ton; phosphorus, 35 pounds per ton, and lime 682 pounds per ton. In order to get this value from ashes it is necessary that they be protected from rain, as most of the potash is soluble in water and is lost by exposure. After coating, the potash content of ashes was found to be 22 pounds per ton. The ashes should be stored in a dry place until applied to the soil. "On soils that are poorly drained and acid, ashes have an excellent effect. The land becomes more amendable to culture, is readily kept in good tilth, retaining its moisture in dry seasons and favoring drainage in wet seasons. "Lime is essential to plant nutrition, and none of the higher plants can reach maturity without a normal supply. Some of these plants such as clover, beans and alfalfa, require so much lime for their development that they are called 'lime plants.' The potash and phosphorus are likewise indispensable to plant growth, and ashes offer a cheap and convenient source of supply."