

## WOOD DISTILLATION PROCESS IMPROVED

Present Method is Perfected  
By Professor Stafford of  
University of Oregon

Prof. O. F. Stafford, head of the university chemistry department, has perfected a process for utilizing waste wood to obtain a superior grade of charcoal and wood distillation products used in a number of basic industries.

Because of the great amount of cheap waste wood material available in the Northwest, it is believed that the lumber industry and other enterprises will be keenly interested in Prof. Stafford's success. Heretofore it has not been commercially practicable to utilize mill waste in the carbonization and wood distillation industries.

By the Stafford process a fine grade of charcoal can be obtained as well as the usual by-products of carbonization acetic acid, acetone and wood alcohol, basic in the manufacture of such articles as dye, paints, varnishes, celluloid, smokeless powder and artificial leather. A considerable amount of charcoal is used in the chemical industry; for example, in case hardening steel. Bagged charcoal is consumed extensively in many large cities. Charcoal briquets are in demand as fuel. The Pennsylvania railroad is making use of briquets made by the Stafford process.

Cord and slabwood have been accepted material used in making charcoal and its by-products. As small waste wood is materially cheaper than either slab or cord wood, the desirability of utilizing it in carbonization operations has long been recognized. Eight hundred applications have been made at various times at the patent office by those who thought they had hit upon a process of carbonizing small waste wood on a commercial scale. The failure of these efforts, up until the Stafford process was proved successful, have been due, in general to heavy costs of installing and maintaining the complicated mechanical appliances required.

The retort used in the Stafford method is a cylinder, 32 feet high and 9 feet in diameter. The cylinder is set vertically and the appliances are such that the wood to be carbonized is fed continuously into the top, while the charcoal is withdrawn continuously from the bottom. A remarkable feature of the process is that no heat is applied to the cylinder after the process once is started, the carbonization of the wood being spontaneous under the condition which the Stafford invention maintains.

The Stafford method depends upon an entirely new principle. Before Prof. Stafford began his experiments, the wood used in carbonizing work has always contained moisture. Prof. Stafford experimented with perfectly dry wood. He found that when the dry wood is heated under his process to the temperature at which the charring begins the carbonization went along to completion without further application of heat from the outside sources. This is referred to by chemists as an exothermic process.

The cost of installing a plant under the Stafford plan is considerably less than that of building an oven retort plant of equivalent capacity. It has other advantages among which are low depreciation and low labor and fuel costs as compared with other systems.

It has not been demonstrated whether the charcoal made under the Stafford process can be used in the iron industry.

In the working out of the Stafford process in the Pacific Northwest Douglas fir would be the most available species of wood. It occupies an intermediate position between the hardwoods and the soft or resinous wood, such as the southern long leaf pine. Hardwoods give a high yield of wood alcohol and acetic acid, while the southern pine gives low yields of alcohol and acid but a high yield of turpentine and oils and resins.

While Douglas fir will not prove as favorable a material for wood distillates as the hard wood or resinous woods. It is the judgement of those familiar with the Stafford process that the growth of the Pacific Northwest industries and the development of foreign markets will justify a wood carbonization industry here of considerable magnitude.

## Man Is Injured By Live Electric Wire

C. R. Rees, electrician for the Mountain States Power company, narrowly escaped death yesterday morning when a wire with which he was working came in contact with a high tension switch.

A charge of 11,500 volts passed through his body, severely burning his left hand, and paralyzing his arm and back.

Mr. Rees and his crew were installing a high tension switch at the substation of the power plant, and the wire with which he was working on the second floor in some way swung into contact with the switch. Luckily it also touched an iron pipe at the same time, says Mr. Rees, or the charge would have killed him instantly. While the wire was in contact with the switch, he was unable to release his hand, and the powerful current went completely through his body. Little holes, about the size of pin holes, were burned in the bottoms of both feet. The wire swung free after being in contact but a few seconds.

This is the third experience with contact with live wires that Mr. Rees has had, and he states that he hopes it is his last. When asked to describe his feelings he said: "It felt like I was exploding all at once, and at the same time all feeling left my arm and back. Although it is not particularly painful, you are filled with an overpowering sense of dread. It is a feeling that I never want to experience again."

Mr. Rees has been with the Mountain States Power company since July, and has been an electrician for ten years. He was able to return to work as soon as his injuries were dressed.

## POWER COMPANY MAKES \$200,000 BOND ISSUE

That a new issue of convertible gold notes amounting to \$200,000, due in 1936 and paying 7 per cent interest semi-annually, will soon be offered to the customers of the Mountain States Power company, was the announcement made by M. C. Brewer, vice-president and general manager of the company.

Because of the large amount of extensions and other improvements made necessary by additional business an opportunity for the investment of additional capital has presented itself. Following its avowed policy of customer ownership, the company is offering the people which it serves these bonds instead of placing them on the market in the large financial centers.

Mr. Brewer states that the new note issue is comparatively small, amounting to \$200,000, and that he anticipates its over-subscription within a short time. The \$200,000 of 8 per cent ten year convertible gold notes with which the company launched its customer ownership policy, was entirely absorbed by hundreds of the customers of the organization, and none has been available for some time.

The difference in the interest rate—7 per cent on the new notes, compared with the 8 per cent on those outstanding—is interesting because it shows an increasing abundance of capital for conservative investment, and therefore a lower yield to the investor. In Mr. Brewer's opinion, this tendency will continue and before long utility companies will be able to secure all the new money required for construction purposes at 6 per cent or even less.

The growth of the business of the Mountain States Power company during the past few years has been quite remarkable. A handsomely designed and private booklet just issued by the company shows many of the properties and gives statistics of a striking nature. The output of gas and electric energy has more than doubled in the past six years and the number of customers has increased from 16,236 to 23,682. A map of the territory served shows that 43 cities and towns with a total population of 65,000, are now supplied by the organization.

## CHRIST OR SANTA CLAUS

To wish you all a Merry Christmas you are invited to attend the White Gifts Christmas exercises at the Baptist church, Sunday evening, December 24, at 7:30 p. m. "Nor Doth the King Regard one Gift Above Another So Long as All be White." The gifts are to be sent to the needy of Astoria.

In the morning the pastor will speak on "Christ a Santa Claus."  
EDGAR B. LUTHER, Pastor.  
Dr. S. Ralph Dipple, dentist, Springfield, Oregon.

## SCHOOL CHILDREN TO GIVE PROGRAM

Christmas Exercises Will Be Held at Parent-Teacher Meeting Friday

Announcement of the Christmas program to be given at the meeting of the Parent-Teachers association, to be held in the Lincoln school at 2 o'clock Friday afternoon has been made by C. E. Lambert, principal of the Lincoln school.

According to Professor Lambert, the program consists of a large variety of appropriate Christmas songs, exercises and skits to be given by the pupils of the primary grades. The children have been working hard preparing for the occasion and it may safely be said that this program will be one of the best, if not the best, ever given by the students of the school.

The program will be as follows: Christmas Greetings, by six boys and girls of the first and second grades; song, "Up on the Housetop" by everyone; an exercise, Merry Christmas, by fourteen girls of the first and second grades; and exercise, What the Reindeer Did, by seven boys and girls of the second grade; song, "Hang up the Stocking" by the girls of the first and second grades; Story of The Christ Child, by the children of the third grade; dialogue, A Visit To Santa Claus, by the children of the first and second grades assisted by Kenneth Crusberg and Ruth Carlton; an exercise, Santa's Reindeer, by the boys of the first and second grades; dramatization, Little Red-Riding-Hood, by the children of the first and second grades; Dairy Maid Song, by the girls of the second grade; dramatization, The Leaves and the Shoemaker, by the children of the third and fourth grades; Song, "Holy Night" by all of the school children.

Everyone is invited to attend the program for which no admission will be charged. Parents having children attending the school are especially urged to attend and in addition to enjoying a pleasant afternoon to incidentally boost the Parent-Teachers organization, in which they should all be interested.

## TRAFFIC OFFICER ILL; ONLY 8 ARRESTS MADE

Due to the illness of the local speed officer, Earl Vaughn, only eight offenders of the traffic laws have been haled into court in the past two weeks. The cold spell, which, due to ice on the streets made speeding especially dangerous, is also given as a reason for the unusually small number of arrests.

The names of the offenders, and the penalties are as follows: John Doe, speeding, \$10; Marion Veach, of Eugene, speeding, \$15; B. T. Marshall, speeding and no driver's license, \$20; P. S. Chase, speeding \$15; C. Bryan, improper lights, \$2; and W. A. Fisher, speeding, \$10.

## EVANGELISTIC SERVICES AT M. E. CHURCH CLOSE

The evangelistic services which have been running in the Methodist church of this city for the past two weeks and a half came to a close Wednesday evening. Altogether they have been very successful, and in some ways quite remarkable. In spite of about the most adverse conditions that could have been found the results were very satisfactory. The series started out in one of the most persistent rain storms of the year, followed by what is far worse for Oregonians—a cold snap, with snow and ice which made the going very difficult. Only during the last few days has the weather been propitious. And on top of that came the Price meetings at Eugene, which attracted church-going folks from far and near, and cut into the attendance at these services. But in spite of all that this was undoubtedly one of the most successful meetings that Springfield has had in many years.

Miss Caffrey is an unusual woman, to put it mildly. She is a strong preacher, and a natural-born evangelist. She works with the best as an evangelist. Miss Miller is one of the most successful workers with children in the field today. And undoubtedly their musical numbers were highly appreciated by all lovers of good music.

## TEMPORARY DRAFT OF PROGRAM MADE

Christmas Songs Are Feature Of Exercises To Be Held Saturday Night

Rapid progress and one-hundred per cent cooperation has been reported by the committees working on the community Christmas tree which will be held in this city at the corner of 4th and A streets at 7:30 Saturday evening.

Although a definite program has not been arranged for the evening a temporary draft has been submitted by the program committee, which is composed of the Springfield schools. According to the present plans the program will open with a song "All Hail The Power of Jesus Name," by all present. The opening song will be followed by the invocation which will be given by Rev. Sater of the Christian church which will be followed in turn by a song, "Up on the House Top," by the children; a duet, "Star of the East," by Charline Lambert and Myrtle Harvey; an exercise by the children of the first and second grades of the Lincoln school under the direction of Mrs. Lambert; a song, "Hang Up the Stockings," by the children of the first and second grades. Two songs, "Holy Night" and "It Came Upon the Midnight Clear" by the High school glee club; an address by Rev. Luther, of the Baptist church; musical selections by a mixed quartet from the Methodist church, a male quartet from the Methodist church, the choir of the Methodist church and singers from the Baptist church; benediction by Rev. Yarnes of the Methodist church; the arrival of Santa Claus and the giving out of the presents will conclude the program.

The community Christmas tree is being held under the auspices of the American Legion in cooperation with other organizations in the city. A central committee composed of representatives from the Legion and one representative from each of the other organizations, headed by M. B. Huntly has been working on the project.

## TOWN AND VICINITY

The Methodist Sunday school will have a Christmas tree and party for the Sunday school in the basement of the church, Saturday-afternoon, December 23.

FOR SALE—Honey, 15c per pound. Dill pickles 50c per gallon. Bring your bucket one mile east of Springfield. P. H. Emery. 2tp.

Monday evening after lodge, the Rebekahs had a feed and social good time.

Whole pork shoulders 16 cents per pound at Swarts & Washburne.

The Christian Endeavor will hold a candy sale Saturday afternoon in the Long & Cross building.

The Baptist ladies who held their bazaar last Saturday, report a very good patronage, considering the weather. About forty dollars was taken in. This organization holds these sales every three months, instead of once yearly, as is the custom of the Ladies aid of the other churches of the town.

Nice pure pork sausage 15 cents per pound at Swarts & Washburne.

W. O. W. initiation at the hall every Tuesday evening.

Mrs. Melvin Fenwick is able to be out again after being confined to her home some two weeks, with the flu.

FOR SALE—A team wagon and harness. Weight 1400; \$250. At Thurman's feed barn.

Mrs. Lina Howard, of Lowell, and Mrs. Frank Warner, of Oakridge, were visitors at the home of Cliff Abrams, in Springfield over the week-end, returning to their respective homes on Monday's Cakridge train. The ladies are aunt and mother of Mrs. Abrams.

John Miller, who is employed by the Stewart Fuel company, has been quite ill the past week, and was unable to work.

## Barrel Company To Close Doors

Announcement of the closing of the National Products company, a concern which has been engaged in the making of barrels and barrel shooks here for the past year, was made yesterday by the superintendent, W. M. Killeen. W. M. Dennis and C. Trout, of this city, are also interested in the company.

Unsuitability of the timber for barrel shooks was given as the reason for the action, according to Mr. Killeen, who states that the machinery will either be sold or moved to the lower Columbia where the timber is better suited to the needs of the concern.

The National Products company has a plant valued at \$50,000, and has been employing ten men full time. The production has been about 200 barrels a day.

"We are well pleased with Springfield as a location for the plant," stated Mr. Killeen, "and our force was efficient and capable. We could easily and profitably dispose of all the barrels we could manufacture, provided they were of the right sort and quality. It is for these reasons that we have remained for the past year. We have experimented with every kind of timber products obtainable here, and none have the right qualifications for good barrel shooks. This is our only reason for leaving at this time."

The timber required, says Mr. Killeen, must be very straight, since the shooks are split and not sawed, and must be entirely free from knots. The fir found in this locality, while easily split, is usually full of sap knots, and is inclined to split out when bent. Other forms of wood grown near here, are not suitable, either because of defects, or because sufficient material could not be had.

The company now holds a tract of timber consisting of over a million and a half feet in the Siuslaw. Disposal of this has not been arranged for.

Although no definite plans have materialized, Mr. Killeen stated that the concern might move to the Lower Columbia, where yellow fir, the variety best suited for barrel shooks ex-yellow, and while the lumber is of a very superior grade, it is not suitable for cooperage, says Mr. Killeen.

Neither Mr. Killeen nor his associates, Mr. Dennis and Mr. Trout, have announced their future plans. The fir found near here is a cross between red and white.

His brothers death. He formerly lived in this vicinity, but had not been here for twenty-one years. Needless to say he saw many changes in the place. He left for his home Wednesday.

Dr. and Mrs. S. Ralph Dipple expect to leave Thursday evening for Bandon, where they will spend Christmas with Mrs. Dipple's parents.

Mrs. F. H. Walker, whose home is on 5th and G streets, has been having a severe attack of bronchitis, which has affected her voice. She can scarcely speak above a whisper.

Geo. Perkins has been engaged, for the past two weeks, in finishing up the upper story of the Crites on 9th and Oak streets, in Eugene. The work has progressed so far as to be ready for the plastering and after that some little time will be needed for the finishing touches. The building is to be divided into four apartments for housekeeping and will be steam heated and modern throughout. Fred Barnard has been assisting in the work.

Born to Mr. and Mrs. D. Dowdy, of 4th and G streets, a girl, on December 20, weight 3 lbs.

Mrs. Paul Basford is spending the Christmas holidays in Seattle with her mother, Mrs. Tom Trimm. Mrs. Trimm visited here last summer.

The Priscilla club will meet Friday afternoon with Mrs. Trubert Henderson, on B street between 6th and 7th, and along with other entertainment have their annual Christmas tree.

Mrs. Steve Bowles, of Oakridge, was down the first of the week doing her Christmas shopping.

John F. Ketchum and wife returned Sunday evening from a trip to the Middlewestern state, going by way of Seattle to Omaha, Nebraska and returning by way of Denver, Salt Lake City and Los Angeles. They visited with Mrs. Ketchum's parents in Nebraska.

## COMPENSATION ACT GOOD SAYS L. L. L.

Local Lumbermen Ask That No Change Be Made In Act By Legislature

By "Debs" McKinnon

From the time our "Andy" felt himself a sort of a super-engineer with his hand on a great throttle, the members queried and thought him a dominant force as the words with magic slipped from his lips, in shaping large policies for the organization. It was as if his great mind recognized the deadliness of delay by the way things "Gumped" along all under the proper headings. Much of the discussion which was permitted was constructively critical of the 4L organization. Rare statements sparked, to wit: "If the 4L didn't do something about its own membership and increase wages to a much higher plane, the organization would go 'Bust'". However, when this meeting finally adjourned, the members carried home the idea that the 4L might possibly endure for some little while yet.

The outstanding contribution from Local 70, District I, of the L. L. L., to the progress of the world at the meeting Monday, December 18, 1922, in the W. O. W. hall, was the approval of the resolutions drafted by the secretary in keeping with instructions of a special assembling of the members which occurred Monday, December 11. Resolutions are as follows:

Whereas:

The workmen's compensation law has proven in most respects to be entirely satisfactory to both employer and employee, and whereas:

The employee members of Local 70, District I, are unalterably opposed to any change in the law favorable to insurance companies, therefore be it resolved:

That as an organized body we go down on record in accord with making the act compulsory, and to lend our support to any amendments which will strengthen the act and provide just compensation for the injured; such as, raising the minimum and maximum allowances in total disability cases. Further, be it resolved:

That we are for compensation for the injured from the very moment of their incapacitation, and that we pledge our efforts toward the extension of the compensation law to include compensation for those in industry who are quarantined on account of contagious diseases. Be it still further resolved:

That these resolutions as passed be given publicity and a copy sent to the legislators of the state before the next session of the legislature.

Next in importance, comparatively speaking, was the adoption of a "Bumping System" which is to be tried out at the Booth-Kelly Lumber company's plant to stimulate the growth of the 4L.

The "Bumping System" is unique inasmuch as it aims to give those affiliated with the 4L preference on the job over the non-members. The writer exercises a peculiar knack in citing specific instances: When the conference committee presents a case to the management it is taken under advisement to determine if the experiment would tend to disrupt the organization of the company or interfere with production in any way. This is how it is to work. A non-member is holding down a job which in the present industrial scheme draws a larger reward on pay day and a 4L-or, one who has signed his John Henry to a declaration of independence and sings the Star Spangled Banner to the committee with plenty of steam sizzling in his shimmy shakes into the job, while the non-member takes a lower rung on the industrial ladder. Likewise a 4L-or can exchange shifts with the non-member.

It is believed that a storm of applause will simmer down to a gossamer fineness at the end of this decade and tickle the memory of local 70's intellectual members for their having started something last Monday night.

## THURSTON NOTES

Mr. and Mrs. Taylor Needham, who recently moved from here to Wendling where Mr. Needham is employed as a millwright, spent Sunday in Thurston.

Mr. and Mrs. Arch Shough and Curtis Price, who are working at Lowell came home during the snow storm and stayed until the weather moderated.