

Beef Produced From Sawdust Is Future Prospect

Beef from sawdust is one of the possibilities of the future and certainly sounds good to residents of this area regardless of whether any ultimate results may be expected soon. The south Lane area is in line for a plant of this sort once the proposed pilot plants prove commercial and the commercial feed interests don't block the movement.

A recent front page issue of the Pathfinder, a national magazine was devoted to these possibilities and may be of interest to those who have not been following the progress of the utilization of wood wastes.

The day may be near when mountainous piles of sawdust at lumber mills in forest areas will be converted into high protein livestock feed, into alcohol for synthetic rubber making or fuel blending, into fertilizer and plastics.

This is being done on a huge scale in Germany now. And to a lesser degree in Italy and Japan. It is providing the Nazis a cheap new source of concentrated protein and other supplies that help them to prolong the war.

Official Washington knows the same can be done in the U.S.A., with better results. Proof was furnished last summer when the Madison, Wis., Forest Products Laboratory of the Forest Service, Department of Agriculture, thoroughly tested and improved the German process of making wood sugar—alcohol or protein is obtained from the wood sugar by fermentation—in pilot plant operations at Marquette, Mich. The job was done to clear the way for a possible new source of industrial alcohol.

Actual production is still in the talk stage. The Gillette Committee investigating the industrial alcohol and synthetic rubber phase of farm crop utilization for the Senate knows most of the facts, and is disturbed at the slowness in getting started. Senator Guy Gillette of Iowa, chairman, thinks wood sugar "is a very attractive field for development." He indicates some stern prodding may be in order when public hearings are resumed shortly. There are hints of influences at work to head off potential new competition.

Some progress is being made, however. Based on what was learned at Marquette, Dr. J. A. Hall of the Forest Service immediately suggested to the WPB the construction of two large plants, one in the Northwest Pacific, the other in the South, to gain industrial scale operating experience. Oregon Lumbermen organized the Willamette Valley Wood Distillation Co. and hope to obtain WPB permission to set the Eugene area. WPB's Office of Production Research and Development is having designed a plant to make alcohol from wood sugar. Beef from sawdust.....CONT'D

Defense Plant Corporation, an RFC subsidiary, it is indicated, will finance construction recommended by WPB.

During World War I this country made some wood sugar but the results were very unsatisfactory, slow, costly and the alcohol yield only about 16 gallons a ton of waste. The German process, named the "Scholler" for the young chemist who invented it, is the same hydrolysis principle but produces about three and a half times as much at greatly reduced cost. It obtains half a ton of sugar from a ton of dry sawdust. This will make either 500 pounds of high protein feed or 50 to 60 gallons of alcohol—the same kind of alcohol as from blackstrap molasses and grain. Also there is a residue of some 500 to 600 pounds of lignin which, Dr. Hall believes, offers "a lot of opportunities for chemical utilization."

Cost of producing wood sugar alcohol is estimated at from 20 to 25 cents a gallon—the government now pays about 90 cents. Dr. Hall says that a return of only a cent a pound for the lignin will reduce this cost by 10 cents a gallon which would mean 10 to 15 cents a gallon alcohol. He sees a "strong probability" that this new industry "will be found capable of producing alcohol or other fermentation products of sugar at a price far below any competing material."

As for high protein feeding products from wood sugar, one of the largest mixed feed manufacturers, after he and his chemist had checked carefully what is being done, confided to a friend: "Its possibilities are breath taking."

Chief proponent of wood sugar is the organized lumber industry which estimates an annual wood waste of 20 to 30 million tons, enough to produce more than a billion gallons of alcohol or 5 to 7½ million tons of high protein feed. About a third of the waste is

at the mills, the larger part being where the logs are cut.

Present discussion centers on using only mill waste, mostly sawdust, at heavy concentration points where supplies are readily available to operate plants averaging an annual capacity of 5 million gallons of alcohol. Forest Service surveys indicate there are at least thirty of these; in other words, production of 150 million gallons awaits only the necessary WPB permission, plus government financing, to construct the plants.

America's estimated 1944 industrial alcohol requirements are 640 million gallons, more than four times the amount normally used. A considerable part of this is for synthetic rubber production. As now planned two thirds of the alcohol will be made from about 170 million bushels of grain, chiefly wheat. If wood sugar alcohol production were ordered in line with the quantity of sawdust estimated to be immediately available, it is said some 60 million bushels of wheat could be saved for food and livestock feed, against the threat of a short crop.

More than two years have elapsed since the possibilities of increasing high protein feed and alcohol supplies from wood waste, were first brought to the attention of responsible government officials. They were thinking then in terms of surpluses rather than shortages so turned a deaf ear to a war refugee.

The refugee, Erwin M. Schaefer, head of the Tornesch Chemical Works, near Hamburg, that had developed the Scholler process from the laboratory stage to large scale production, was able to interest a few private business men, however.

Although WPB finally listened to Schaefer, and rejected his proposal fifteen months later, his persistence had much to do with ordering the Marquette pilot plant operation. He is associated now with the Timber Engineering Co., a subsidiary of the National Lum-

WINDOWS OPEN? WINDOWS CLOSED?

By Dr. H. A. Hagen
The question-and-answer game "Shall Windows Be Open or Closed?" is a common winter diversion of the Jones family—and doubtless many another.

Who is right? Who is wrong? Overheated rooms without occasional brief ventilation will enervate still further a naturally delicate child. But neither should it be permitted to remain near an open window and be suddenly subjected to the other extreme for a prolonged period. A wrap should be thrown around the child, and it should be aroused to activity, in which case the variation in temperature would do no harm.

One minute is sufficient to admit fresh air; again, a little later for two minutes. Moreover, the porous walls and crevices around doors and windows, although not noticeable, provide constant change of air.

When one has a cold, fresh air in a moderate temperature ranging from 68 to 72 degrees, is soothing to the inflamed membrane of nose and throat. If chills or fever have developed, one should remain in bed rather than sit in an overheated room breathing the dry air charged with dust particles and the invisible products of combustion.

Ventilation of homes can be regulated sensibly without constituting a hazard to any member of the family. True enough, a little cold air never harmed anyone—and heat can also be endured—but the danger lies in sudden changes for which one is unprepared. It is therefore a wise precaution, for young and old, to be protected by extra clothing when leaving a warm room to go out into the cold.



Not all the victories are on our side; not all the losses are our enemy's. Here you see barrel upon barrel of good American fuel going up in smoke after a Jap strafing. The boys cannot be replaced but the material can—that is, if all real Americans do their utmost in the war effort and buy War Bonds. Make your dollars work for victory. Buy More War Bonds.

U. S. Treasury Department

Wants

RATES: 2 cents per word for 1st insertion, 1 cent per word for subsequent insertions; Minimum charges: 1st insertion 30 cents, subsequent insertions, 25 cents each insertion. Service charge of 15 cents additional will be added for want ads charged after Thursday. Keyed ads 25 cents extra. Card of thanks, resolutions, etc., take same rate as want ads.

WOOD

We have purchased the Blue Mountain Fuel Co. from Norman Williams and are prepared to give you quick service on your orders for block and slab wood. We appreciate your business.

Blue Mountain Fuel Company
by Eastburn & Hixson
Phone 19-F-13
25-tf-25p

FOR SALE:

About 82 acre Ranch, three miles from center of town, some tillable land, the rest timber and pasture, plenty water from two good covered springs. Five rooms house with electricity, running water. Chicken houses, barn, some fruit trees. Union high school bus, cream and mail route past door. Grade school close.

Price \$6,500.

HENRY ROHDE
Lorane Route
Cottage Grove, Oregon

FOR SALE—

WOOD FOR SALE: Block, planer ends, slab, phone 178L. 22-tf

BABY CHICKS
White Leghorns, New Hampshire, Geo. M. Petersen Hatchery, Rt. 1, Eugene, Oregon. 12-tf

FOR SALE: Small oil heater, \$30.00. Phone 178L. 23-tf

FOR SAND, GRAVEL, CRUSHED ROCK, call Kelly Cooper, 1242 Madison Avenue, phone 286R, Cottage Grove. Your order appreciated. 26-tf

FOR SALE: Heavy slab and block wood mixed \$10.00. Strong two cord loads. Prompt delivery. Walker lodge, Phone 30F14, Cottage Grove. 26-4tp-29

FOR SALE: 2½ acre place with two bedroom house, two stall garage. House wired and fixtures up. Electricity by door, but not available for duration. Reasonable down payment. Balance like rent. Ray Van Schoick at Steel bridge on Row river road. 26-3tp-28

Auction Sale

Sunday, February 20
1:30 p. m.

1 mile out South Sixth street. Watch for signs. Several head of milch cows. Household furniture including new davenport and chair. Monarch electric range, pre-war, used very little. Chairs, tables, rugs, etc. Tools, bicycle with balloon tires. Trailer house with built in, sinks, wired. Also light trailer.

ROY MASON, auctioneer.
ED FINNERTY, clerk.

ber Manufacturers association. Working with him is another Nazi victim, Dr. Edward Farber, many years chief chemist for Schaefer's principal rival industry in Germany. Dr. Farber is conducting lignin experiments in the company's laboratory at New Haven, Conn.

Much smaller potential source of wood sugar is waste sulfite liquor at pulp mills. With the new conversion plant at Thorold, Ontario, it is estimated that 43 million gallons of alcohol could be had annually from waste sulfite liquor of mills in the United States at a cost of 20 cents a gallon.

Boneless Meat

Some packers plan to bone-cut and cut meat in their own plants after the war. Besides saving shipping costs, bones kept at the packing plant can be made into feed, gelatin, bouillon and so on. Poultry, too, will be eviscerated, inspected, washed under high pressure, frozen and wrapped in a moisture-proof, transparent wrapper ready for your pan or oven. You'll be able to buy a package of breasts, livers or whatever cuts you want, besides a whole chicken.

FOR SALE: Wood business consisting of 2 trucks, wood saw and seven extra casings for trucks, including 4 new recap casings. Also extra motor for wood saw. Apply to Row River Fuel Co. 27-1tp

FOR SALE: 40 acres, furniture, buzz saw, tools, canned fruit and jars and hogs. Q. E. Coop, Blackbutte route, Cottage Grove. 27-1tp

FOR SALE: 30 New Hampshire pullets, 50% laying now. Walker Lodge, phone 30-F-14. Cottage Grove. 27-1tp

FOR SALE: Ford A panel delivery. Henry Kelly, Dorena. 27-1tp

FOR SALE: 7 room house; good bath and shower; electricity; garage and woodshed combined; 2 lots. Good garden ground, berries. Inquire at 1237 Ash Avenue. 27-1tp

FOR SALE: 5 room modern house. Inquire at 718 South 1st Street. 27-1tp

FOR SALE: 5 room house in town. \$1750.00 with \$500.00 down, small monthly payments. See or write A. D. Ashbridge, 2nd road to left on Lorane Route. 27-1tp

FOR SALE: Excellent Guernsey cow, milking 5 gallons daily. \$85.00 cash. James Hemenway, Lorane Route. Telephone 2-F-31. 27-1tp

FOR SALE: Low vine Burbank seed potatoes, \$2.50 per hundred. Also cooking potatoes, \$1.50 per hundred. No deliveries. Claude Arne, telephone 1-F-4. 27-3tp-29

FOR SALE: 1939 Ford coupe with radio. Inquire Mrs. Larry Kellogg, 838 Whitaker Street. 27-1tp

NASH special power unit on frame with shaft and bearings. International farm tractor. Master Chevrolet motor. 9 speed transmission, drawbar, lug wheels, power take off, wood saw attachment. Steel wheel wagon, sloop, 75 cords 8 ft. slab, part dry, 2 miles from Drain on roadside. \$1.00 per cord. WANTED: Pony saw mill. Phone 463, Drain. 27-1tp

UNIVERSAL CIRCULATOR for sale, large size, newly refinished. Write Mrs. Ralph Lynch, Anlauf, Oregon. 27-1tp

FOR SALE: 2 lots 50x100, 4 room house, fruit trees. Priced to sell. Phone 284-Y or inquire 1004 South 4th Street. 27-1tp

FOR RENT OR SALE: Modern 2 bedroom house, outside city limits, near high school. Phone 284-Y or inquire 1004 South 4th Street. 27-1tp

FOR SALE: One O I C Boar 10 months old; 2 Guernsey heifers 19 months old; 2 shoats, farrow in March; weaner pigs. R. Stickrod, Dorena. Phone 18-F-21. 27-1tp

FOR SALE: Attractive home, 4 bedrooms, lovely kitchen. Two blocks from Main street. P. O. Box 194. 27-2tp-28

FOR SALE: 5 room plastered house on First street. P. O. Box 12. 27-1tp

FOR SALE: 8 weeks old weaner pigs, \$4.00 each. Arden Powell, London. 27-2tp-28

FOR SALE: 32-20 revolver; like new and box of shells. Phone, night 128, Day 8F11. 27-1tp

WANT TO BUY—
WANTED: Cast iron scrap. Will pay ceiling prices. Cottage Grove Foundry. 23-tf

WANTED: Will pay cash for house and lot in Cottage Grove.

Box 12, Cottage Grove, Oregon.
25-4tp-28

WANTED: 40 to 80 acres, at least ten in cultivation. No bldgs, must have creek, up to 15 miles out and on road. CASH. Roy Stephens, 7326 North Lombard, Portland 3, Oregon. 24-4tc-28

WANTED: Dog—Australian shepherd and Collie. One white eye, bushy tail. Pay \$50.00. 845 5th Street, Springfield. Phone 740. 27-1tp

FOR RENT—

FOR RENT: Furnished upstairs apartment, up town. Suitable for two. Telephone 130-Y. 27-1tp

FOR RENT: 2 acres, 4 room house, electricity, 1½ miles east. \$20.00 per month. Call Rodmans. 27-1tp

FOR RENT—Floor sanders, waxers and a vacuum cleaner. The Grove Hardware, phone 18. 33-tf

WANTED TO RENT—
Garden spot in or near town. J. C. Belcher, 104 North 6th street. 26-1tp

HELP WANTED—
Wanted: Experienced man to trim and prune a few fruit trees. Phone 173-R. 25-3tc-27

WANTED: Mill hands, Skelton Mitchell Mill at Lorane. Experience preferred but not required. Ceiling wages; 49 hour week; time and half for over 40 hours. Telephone 284-Y or 27-F-4. 27-3tp-29

TO TRADE—

TO TRADE: 5 acres, good 4 room house, running spring water, electricity, young orchard, fenced, small creek through place, good garden ground. 3 miles out on Mosby creek. To trade for house and lot of equal value, walking distance from town. Telephone 19-F-12 or 29-F-3. 27-1tp

MISCELLANEOUS—

WANTED: Boys and girls to join the Sunday school army at the Free Methodist church 9:45 a. m. Sunday. 27-1tp

WANTED: Good homes for part Fox Terrier puppies. Inquire W. L. Brown, 1 mile out Lorane Rte. or phone 25-F-12. 27-1tp

IF YOU PLAN to build or remodel, let me figure on the job. Day work or contract. W. C. Pynch, phone 5F4. 27-4tp-30

DOGS DOGS DOGS

Your dog and my dog needs his license now. Get it before March 1st and avoid a penalty. Obtain city licenses at City Recorder's office. County licenses at County Clerk's office. A. J. Flint, County Dog Control Officer. 25-4tc-28

WATER WELL DRILLING, pumps and supplies. Phone 26F23. J. H. Thomas, Oakland, Oregon. 42-tf

25 Years Experience. Clean, neat work. Paperhanging, painting. C. Maxson, 817 So. Third St. 50-tf

PERMANENT WAVE, 59c; Do your own Permanent with Charm-Kurl Kit. Complete equipment, including 40 curlers and shampoo. Easy to do, absolutely harmless. Praised by thousands including Fay McKenzie, glamorous movie star. Money refunded if not satisfied. Cottage Grove Pharmacy. 26-10tp-35

All kinds of welding, both electric and acetylene. Machinery repairing and blacksmithing. O. K. Welding Shop, in new location, 10th and Jefferson. 1-tf

AT FIRST SIGN OF A COLD
USE 666
666 TABLETS. SALVE. NOSE DROPS

LEGAL NOTICES

NOTICE OF FINAL SETTLEMENT

Notice is hereby given that the undersigned WORTH HARVEY, as Executor of the Last Will and Testament of E LIZABETH FAHRENWALD, Deceased, has filed his Final Report and account as such Executor with the County Court of Lane County, Oregon, and that Tuesday, March 7, 1944, at ten o'clock a.m. in the County Courtroom, County Courthouse at Eugene, in Lane County, Oregon, has been set by the HON. CLINTON HURD, JUDGE of said Court, as the time and place for hearing objections to the same, if any there are, and for the final settlement of said estate. WORTH HARVEY, EXECUTOR. HERBERT W. LOMBARD, Attorney. 25-5t-29

NOTICE OF FINAL SETTLEMENT

Notice is hereby given that SALLIE A. HILL, Administratrix of the Estate of WILBUR M. HILL, Deceased, has filed herein her Final Account with the County Court, Lane County, State of Oregon, and said Court has fixed and appointed Tuesday, the 29th day of February, 1944 at the hour of 10 o'clock A. M. in the County Court Room, County Court House, Eugene, Lane County, State of Oregon, as the time and place for the hearing of objections, if any, to the Final Account and Final Settlement of said estate. Dated and first published January 27, 1944. SALLIE A. HILL, Administratrix. HERBERT W. LOMBARD, Attorney. 24-5t-28

NOTICE TO CREDITORS

NOTICE IS HEREBY GIVEN:

That the undersigned has been appointed Administrator of the Estate of CLINTON E. STEWART, sometimes C. E. STEWART, Deceased by the County Court of Lane County by an order dated February 11, 1944. All persons having claims against said estate are hereby notified to present the same, duly verified, with proper vouchers, to the undersigned at the Law Office of Herbert W. Lombard, First National Bank Building, Cottage Grove, Oregon, within six months of the date of the first publication of this notice. Dated and first published February 17, 1944. EARL STEWART, Administrator. HERBERT W. LOMBARD, Attorney. 27-5t-31

Salesbooks, receipt books, bookkeeping systems. The Sentinel.

Wanted! Men and Women Who Are Hard of Hearing

To make this simple, no risk hearing test. If you are temporarily deafened, bothered by ringing buzzing head noises due to hardened or coagulated wax (cerumen), try the Urine Home Method test that so many say has enabled them to hear well again. You must hear better after making this simple test or you get your money back at once. Ask about Urine Ear Drops today at

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or Bronchial Irritations Due to Colds
Buckley's Famous "CANADIOL" Mixture Acts Like a Flash

Spend a few cents today at any good drug store for a bottle of Buckley's CANADIOL Mixture (triple acting). Take a couple of sips at bedtime. Feel its instant powerful effective action spread thru throat, head and bronchial tubes, choking phlegm, soothe raw membranes and make breathing easier. Sufferers from those persistent, nasty irritating coughs or bronchial irritations due to colds find Buckley's brings quick and effective relief. Don't wait—get Buckley's Canadiol today. You get relief instantly.

Kelly Drug

LEGAL NOTICES

NOTICE OF FINAL SETTLEMENT

Notice is hereby given that SALLIE A. HILL, Executrix of the Last Will and Testament of HOMER JACOB ALLEN, Deceased, has filed herein her Final Report with the County Court, Lane County, State of Oregon; and said Court has fixed and appointed Tuesday, the 29th day of February, 1944 at the hour of 10 o'clock A. M. in the County Court Room, County Court House, Eugene, Lane County, State of Oregon, as the time and place for the hearing of objections, if any, to the Final Report and Final Settlement of said estate. Dated and first published January 27, 1944. SALLIE A. HILL, Executrix. HERBERT W. LOMBARD, Attorney. 24-5t-28

NOTICE OF ADMINISTRATOR'S SALE

Notice is hereby given that under authority of an order of the County Court of the State of Oregon for Lane County, duly made and entered on the 18th day of January, 1944, the undersigned Administrator of the Estate of PERRY WILSON, deceased, will sell at private sale all of the right, title, and interests of said Estate in and to the following:

Equity in real estate purchased from Lyman E. Adams and Lucie A. Adams covering the following described property, to-wit:
Beginning on the East line of South Tenth Street at a point 516.5 feet South of the Southwest corner of Lot 8, Block 4, Georgetown's Third Addition to Cottage Grove, Lane County, State of Oregon; run thence South along said East line of said South Tenth Street 370 feet; thence East 466.5 feet; thence North 370 feet; thence West 466.5 feet to place of beginning, containing Four (4) acres, more or less in Section 33, Township 20 South of Range 3 West of the Willamette Meridian, Lane County, State of Oregon.

Contract dated August 31, 1942, calling for total purchase price of \$375.00, \$150.00 down, \$141.66 February 26, 1943, \$141.67 August 31, 1943 and \$141.67 February 28, 1944, deferred payments to draw interest at the rate of 6% per annum, contract not assignable without consent of seller, title insurance furnished; balance due on contract \$83.34 together with interest at the rate of 6% from the 2nd day of September, 1943.

Said sale will be made on and after the 19th day of February 1944, and bids will be received at the office of HERBERT W. LOMBARD, First National Bank Building, Cottage Grove, Oregon, until a reasonable bid shall have been received, said sale to be made for cash. LYMAN E. ADAMS, Administrator. HERBERT W. LOMBARD, Attorney for Administrator. 23-5t-27

Professional Cards

FUNERAL HOMES

KARL K. MILLS, Mortician.
Phone 202

SMITH FUNERAL CHAPEL
—Phone 101. 6

DENTISTS

DR. W. E. LEBOW—Dentistry
—No. 1 Omer Apartments
Cottage Grove, Ore. Phone 35

PHYSICIANS

H. AXLEY, Physician and Surgeon—Evenings by appointment. Over Kern's for Drugs. Cottage Grove, Oregon.

DR. KATHERINE SCHLEEF, M. D.—Physician and Surgeon. Apartment 10, Omer Apartments. Phone 247.

DR. J. G. RADABAUGH—Physician and Surgeon. 46 years in practice of medicine, 27 years in Lane county. Phone 293R. Office: corner 5th and Madison.

ATTORNEYS

HERBERT W. LOMBARD, Attorney at Law. First National Bank building. Cottage Grove, Oregon. Phone 84.

ALTA KING—Lawyer, 613 Main street. Office phone 254J; Res. phone, 28F31, Cottage Grove, Ore.

INSURANCE

TITLE ABSTRACT CO., 881 Oak St., Eugene, Ore. Edward F. Bailey, Pres. Abstracts, Title Insurance, Escrow.

HARRY K. METCALF, representing Hartford Fire & Casualty Co., and Equitable Life Insurance Society. Phone 115-J. 35

MATERNITY HOMES

BUTLER MATERNITY HOME—136 N. 8th St. Phone 176Y. 41

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