

One drop of water does not make a waterfall--

One man's effort will not build a community

PATRONIZING OF YOUR COMMUNITY STORES AND INDUSTRIES MAKES PAYROLLS

How great this community may grow, how prosperous and complete it may become, depends upon us--our willingness and our desire to work together-- ONE for ALL and ALL for ONE.

SALEM'S BIG PAPER MILL IS DOUBLING ITS CAPACITY AND ADDING VERY MATERIALLY TO ITS EFFICIENCY IN MANY WAYS; LARGEST OF ITS KIND IN ALL THIS SECTOR

The Monthly Payroll Will Be Over Fifty Thousand Dollars a Month When the Improvements Under Way Are All Completed, and Its Forces Directly Employed Will Be About Five Hundred, With About as Many More Engaged in Getting Out and Transporting Raw Materials and in Other Ways Directly Dependent Upon Its Operations

Constantly Improving The outstanding news item in connection with Salem's paper mill for the annual Slogan number last year was the fact that red and Douglas fir wood was being used successfully on a commercial scale, in making high-grade paper--

Coming to Artificial Silk The Salem mill produces the highest grade papers and bleached sulphite on this coast. Bleached sulphite is the raw material of artificial silk, and since hemp, jute and plant fibers of all kinds are high in price, the world's makers are turning rapidly to the use of wood pulp fibers, and the Oregon Pulp and Paper company mill, under the progressive leadership of its efficient manager, C. F. Beyerl, is alert to keep pace with the times; though no stock is yet supplied to the artificial silk makers. This fabric goes under the name of "rayon," used for women's garments.

Wonders Being Worked Wonders are being worked, miracles performed, hourly at the Salem paper mill of the Oregon Pulp and Paper company-- For cord wood from our farms and logs from our forests are being taken in at one end of this plant and turned out at the other end in the form of paper for the markets-- Beautiful paper, embossed glassines in a wide range of colors for candy packages and other uses, grease proof papers for butter and bacon wrappers, wax papers, bond and ledgers papers, and papers for various special uses.

Fall hats and a new line of felts, \$3.95 to \$4.95, and the exclusive Priscilla Dean children's hats at the Salem Variety Store, 295 North Commercial. (*) Parker & Co., 444 S. Commercial. Don't fail to see Parker about repairing your car. Expert mechanics at your service. All work guaranteed. (*) What do you need in the hardware line? Mechanics' tools, household goods and cutlery, anything you wish. Quality at a low price. Square Deal Hdw., 320 N. Com'l. (*)

dent could find enough in its various processes to keep him busy half an average life time.

Some New Things In the making of the bond and letter and envelope papers of the highest grades, which is a new line in this institution, and which gives great promise, a small percentage of balm wood or cotton-wood is being used. Little of this wood had been used here up to a very short time ago.

Alkali proof soap wrappers, both the inside and outside wrappers, are being made in considerable quantities now, and shipped through the Panama canal as far as New York and Philadelphia. There is an experimental plant at this mill. Experiments are being and will be carried on constantly. Whenever there is any thing new in the manufacturing of high grade specialty papers, the Salem paper mill people will "try it once," and if it is worth adopting they will adopt it.

A mill making such a wide range of specialties must have a great variety of cutters and folders and appliances generally. In this respect, this mill has all along been kept strictly up to date.

The Sulphite Plant The Salem paper mill consists of really two plants; the sulphite plant and the paper making plant. The superintendent of the sulphite mill is J. B. Witt. It would be impossible to give the general reader the full details of the wonderfully intricate and interesting processes employed in sulphite making. It would take too much space (whole books are published on the subject), and many of the processes could not be grasped without a thorough knowledge of chemistry such as only few men in each country possess. But the following paragraphs will give a general idea of the sulphite plant of the Salem paper mill.

The Sulphite Mill Proper The wood room has a capacity of 60,000 feet of hemlock or white fir in eight hours. The equipment used in preparing the wood is as follows: One electric log hoist, two 84 inch cut-off saws; two vertical type steam splitters; four hand barkers; one 88 inch chipper; two rotary chip screens. The wood room also has cutting and stacking capacity for 60 cords of wood in eight hours. This wood is used as a reserve. The monthly wood consumption of this plant has been approximately 3,000 cords, or 1,714,000 board feet per month. It will be doubled with the increased capacity.

Acid Plant The acid plant will be practically new, as mentioned above. The old towers will be discarded. There will be two large acid storage plants 20 feet in diameter, 30 feet high. There have already been installed 15 new Valley Iron Works flat screens; to be used when the new improvements are completed; will be used for recoloring the bleached pulp; to make it clean. The fact is, the whole great plant is being completely re-equipped.

Walter H. Zosel, automobile tires, tubes and accessories. Vulcanizing that holds. High quality, superior service. A trial makes a customer. 198 S. Com'l. (*) We have the hat you want at the price you want to pay. Many new patterns and felt hats come in daily. The Vanity Hat Shop, the place to buy the Beth Hat. (*)

is being practically rebuilt; must be, to double its capacity throughout.

A Lot of Water The whole city of Salem, outside of the paper mill, used on June 25 of last year 6,132,200 gallons of water. That was the biggest day. The average for the year was 2,822,490 gallons a day.

The Salem paper mill will, as stated above, now have a capacity of 16,000,000 gallons of water a day, and will use most of it, most days. That is a lot of water. The substance that goes into the paper making machines is 99.7-10 water--and it comes out at the other end finished paper.

And a Lot of Juice The Salem paper mill takes about a third of the "peak load" of electricity used in all Salem. But the paper mill goes right on using electric power 24 hours a day, and it therefore uses almost as much as all the rest of Salem in each month. F. M. Peyton, who has been with the mill ever since it started, is the chief electrician. He has a domain of his own, in a room at the west end of the machine room. It is the control or switch board room. The plant carries a 6,000 horse power connected load. There will be over 300 motors to look after when the whole constructed plant is going. There are connections to look after now for 295 motors; 75 of them new.

Six Years Old Now The Salem paper mill has been in operation six years. The first car of paper for the market was shipped from this plant October 1, 1920. On that date, the Statesman was printed from paper made at this mill--from a trial run of wood pulp secured from a mill using ground pulp. News print is made from ground wood pulp. The sulphite process is used exclusively by the Salem mill.

No single day has passed in all the six years without some improvement or plan for improvement. Paper Making Process The wood is delivered to the mill in the shape of cord wood or slabs and the bark removed by a machine known as a barker. It is then reduced to chips. This is accomplished by machines called chipper. The blocks of wood are conveyed direct from the barker or from the storage pile, as the case may be.

The chips are cleaned of sawdust and dirt and conveyed to the top of a hundred-foot building known as a digester house. At the top of this building provision is made to store 150 cords of chips from which the digesters are filled. These digesters hold 24 cords of wood at one charge or "cook" as it is called. The chips are dropped in at the top of the digester, and when it is filled, sulphurous acid to the extent of about 25,000 gallons is run in, a cover clamped on, and the mass is raised to a temperature of 300 degrees or more and a steam pressure of 70 pounds is maintained for from 10 to 20 hours, according to the quality of the sulphite required.

This cook is then released from the digester under pressure, into a large wooden vat or blow pit. The action of the sulphurous acid on the wood separates the fiber and bleaches the color, so that after it is washed in the blow pits it is a white, cottony substance. From the blow pits it is pumped to screens and to beaters, where it is ground and refined until it is in a fit state to go to the paper machine.

This machine takes the stock in a liquid state and it flows onto an endless wire mesh cloth to which a shake is imparted so that the stock is eventually distributed across the face of the wire and at the same time a large part of the water drops through the wire and is gotten rid of. The sheet is transferred from the wire to the felts and is carried between the rolls of metal or hard rubber and from these press rolls is taken to the dryers. These dryers are large hollow iron cylinders around which the paper travels in contact with the face of the dryers. Steam is admitted to the interior of the dryers and the paper

comes out at the end of the dryer run thoroughly dry and is subjected to a calendering to give it a firm texture and finish.

In the case of glassine paper a further calendering is necessary. In making the sulphurous acid with which the wood is cooked, limerock is placed in towers near by a hundred feet high and water is allowed to percolate down through the limerock. Sulphur is burned in a rotary burner and the gas after being cooled thoroughly in submerged pipes passes through a fan which forces it through the three towers one after the other.

The sulphur gas is absorbed by the lime water which is pumped from the bottom of one tower to the top of the other. When this acid has the proper strength it is pumped to storage tanks from which it is run to the digesters as needed.

The mill started operation with one paper machine, but a second machine was added the first year, and a third, the largest of all, in 1922.

The main machine and beater room is the most substantial and attractive building of the kind on the coast.

Miscellaneous Items The glassine papers turned out here are water and air and grease proof.

The fiber produced by the sulphite process is pure cellulose--the same as celluloid combs are made of. The sulphite process takes the lignin from the wood; about 55 per cent of the wood-on the average being lignin, which is waste, leaving on the average about 45 per cent of cellulose, or sulphite.

Much of the preferred stock of the company is owned by people who live in and around Salem, to whom 8 per cent annual dividend checks are sent monthly.

The Personnel The Oregon Pulp and Paper company is largely under local management. Its officers are: F. W. Leadbetter, president; Dr. B. L. Steeves, vice president; W. F. Walton, treasurer; Frank D. Andreae, secretary. Directors, including these four officers, John H. McNary, E. T. Barnes, W. E. Hayes, Truman Collins, L. L. Leadbetter, George Putman, C. F. Beyerl, and Dr. M. C. Findley. Superintendent of the paper mill, Thomas B. Armstrong. Superintendent of the sulphite mill, J. B. Witt. Superintendent of the finishing room, W. A. Shaffer. Chief electrician, F. M. Peyton; master mechanic, F. L. Odum; chemist, Edward P. Wood. Office manager, H. E. Ingrey; auditor, W. P. Donnelly; time keeper, W. J. Witt; sales department, Ralph Olson. Traffic manager, F. W. Karr. General office force: G. Halseith, Wayne Shumaker, Mrs. Ipha Knox, Miss Ruth Peyton and Miss Bessie Taylor.

C. F. Beyerl, the general manager, has been on the job for five years, and in all that time he has dreamed the dream of the complete mill that is coming into being now--the largest and the best of its kind west of the Rocky mountains, and one of the largest of its class in the whole country.

Salem Markets table listing prices for various goods like No. 1 wheat, oats, hay, pork, mutton, beef, poultry, eggs, butter, etc.

Oakland Pontiac Sales and Service VICK BROS. High Street at Trade SEND A COPY EAST

CATTLE DISEASE REMEDY NO GOOD

OAC Booth at the State Fair Grounds Will Show the Oregon Farmers How

The farming public scored a victory over a class of impeters constantly preying on agriculture, when a so-called "cure" for infectious abortion in cattle was recently exposed in court, reports the Oregon experiment station.

This material, which consists largely of brown sugar and bran, was shown to have no merit in the control of that dread disease of the dairy herd. In spite of the wide publicity given to the work of painstaking scientists, who have no thought of personal gain, and who have conclusively proved that some of these so-called "cures" cannot cure, many farmers still waste money buying quack stock remedies.

The Oregon Agricultural College experiment station has been working for years on the best system of control of infectious abortion. This will be a part of the experiment station exhibit in a dairy and veterinary booth near the stock barn at the state fair grounds.

The seriousness of this disease may be recognized when it is known that it has caused the loss of the last 12 calves cropped in one pure bred herd. The experiment station will demonstrate its method at the fair and show farmers how to avoid losses from this trouble.

Slate surface roofing applied over your old shingles. We have over 200 jobs in Salem, Nelson Bros., plumbers, sheet metal work, 355 Chemeketa. (*)

Don't be held back by tire trouble. An ounce of prevention is worth a pound of cure. Buy your spare now, save yourself a rainy walk. Malcolm's Tire Shop. (*)

Bonesteel Motor Co., 474 S. Com'l., has the Dodge automobile for you. All steel body. Lasts a lifetime. Ask Dodge owners. They will tell you. (*)

FARM REMINDERS FROM THE COLLEGE

Now Is the Time to Make Selections of Seed Corn and Potatoes, Etc. (Following are excerpts from a current news bulletin of the department of industrial journalism of the Oregon Agricultural college.)

Now is the time to make hill selections of potatoes for next year's seed. Get a bunch of lath or other small stakes. Go through the fields and select vigorous healthy plants that are not near to diseased ones. Avoid potatoes showing yellowing leaves, badly wrinkled or ruffled leaves, or leaves that are discolored or mottled in any way. Stake dark green plants with three to five or more vigorous stalks, not spindly, knobby at leaf stems, or excessively ill. Leaves should be rather smooth.

Keep Your Money in Oregon - Buy Monumental Works Made at Salem, Oregon CAPITAL MONUMENTAL WORKS J. C. Jones & Co., Proprietors

GIDEON-STOLZ CO. Manufacturers of VINEGAR SODA WATER Fountain Supplies Salem Phone 26 Ore.

DIXIE BREAD DIXIE HEALTH BREAD Ask Your Grocer

even, dark green and free from mottling.

Corn ear selecting time will soon be here. Select good ears from erect stalks, vigorous, healthy and early. Drooping ears on long shanks are good for western Oregon. Save no ears from down stalks, weak or suckering plants, or from those with striped or abnormal leaves.

To check the swarms of insects that seem at times almost able to swamp the vegetable garden, fall garden sanitation is a big help. These pests that persist from year to year must find some place to winter over, and many of them lodge in and about the gardens in some form--adult larva, pupa, or egg. Hosts of them may be destroyed by plowing the gardens in the fall and leaving the surface clear except for the late fall and early winter stuff. Then in the spring the ground is lightly cultivated and spread with poison bran mash to get the early starters before the crops are up.

Rye grass and hairy vetch have been profitable seed crops in western Oregon for two or three years. Both are fall sowed on rather heavy land.

Cover crops are said by certain orchard growers of Oregon to be the biggest single factor in good yields. Crumbly soil, increased fertility, better waterholding capacity of the soil, more vigorous trees, and better fruit and higher yields, are listed as advantages by C. L. Long, extension horticulturist of the college extension service.

The Dixie Bakery leads on high class breads, pies, cookies and fancy baked supplies of every kind. Best by test. Ask old customers. 439 Court St. (*)

F. L. Wood and Geo. F. Peed, real estate, 344 State. Farms and city property. They bring buyer and seller together, for the benefit and profit of both. (*)

For students going away to school we are showing a large selection of traveling bags, trunks, hat boxes and fitted cases. Discount prices to students this month. Hamilton's. (*)

The Pontiac Six is outstanding because it is built to outlast. It displays unflinching sturdiness and dependability. See it on display at Vick Bros. (*)

CAPITAL CITY CO-OPERATIVE CREAMERY BUTTER-CUP BUTTER "Known for its QUALITY" Buyers of Best Grade Cream Our Method: Co-operation Our Ideal: The Best Only 187 South Commercial Street Phone 209

Is Your Well Properly Lined? Use our sanitary well pipe, that keeps out surface water, and lets only deep ground water in. Made of strong materials and reasonable in price.

OREGON GRAVEL COMPANY Hood at Front Street Salem

SHIP BY WATER and SAVE THE DIFFERENCE SALEM NAVIGATION CO. STEAMER "NORTHWESTERN" OPERATING ON A REGULAR SCHEDULE--Handling Merchandise and Cargo Shipments Between SALEM and PORTLAND and Way Landings

General Markets

PORTLAND, Ore., Sept. 22. (AP)--DAIRY Dairy exchange net prices: Butter extras 41c; standards, 40 1/2c; prime firsts 38 1/2c; firsts 25 1/2c. Eggs extra 41c; firsts 30c; pullets 30c; current receipts 37c; undersized 21c.

PORTLAND, Ore., Sept. 22. (AP)--LIVESTOCK Cattle steady; receipts, cattle 230; calves 25. Hogs steady; receipts 185. Sheep steady; receipts 260.

PORTLAND, Ore., Sept. 22. (AP)--GRAIN Wheat: BBB hard Sept. 22c; Oct. 21c. Nov. 18 3/4c; hard white bluestem, hard Sept. 22c; Oct. 21c; Nov. 18 3/4c; western white, Sept. 21c; Oct. 20 1/2c; Nov. 18 1/4c; hard winter, Sept. 20c; Oct. 19 1/2c; northern spring, Sept. 20c; Oct. 19 1/2c; western red, Sept. 20c; Nov. 18 1/4c. Oats: No. 2, 36 pound, white feed, Sept. 20c; Oct. 19 1/2c; No. 2, 36 pound gray, Sept. 19 1/2c; Oct. 18 1/2c. Barley: No. 2, 45 pound, BW Sept. and Nov. 27c; Oct. 27 1/2c. Corn: No. 2, EY shipment, Sept. 20c; Oct. 19 1/2c; Nov. 18 1/4c. Millrun: Standard, Sept. 21c; Oct. 21 1/2c; Nov. 22 1/2c.

PORTLAND, Ore., Sept. 22. (AP)--HAZ Buying prices: Eastern Oregon, timothy, 200@22; do valley 17@17.50; chest 17; alfalfa 19.50; hay 13; straw 7@9; oat and vetch 14.50@15; straw 7@9; 7.50 per ton. Selling prices \$2 a ton more.

NEW YORK, Sept. 22. (AP)--WHEAT UNSETTLED CHICAGO, Sept. 22. (AP)--Indices

WELDING ELECTRIC ACETYLENE TRACTOR SPROCKETS

An Oppen Weld Has Always Held REMEMBER THE PLACE 605 MILL ST. C. D. OPPEN

Tracks etc., built up good as new for less than half price. General welding of all kinds. Steel, cast, iron, aluminum etc. An Oppen Weld Has Always Held

DEMAND "Marion Butter" The Best More Cows and Better Cows Is the Crying Need Marion Creamery & Produce Co. Salem, Oregon Phone 2422

T. A. Livesley & Co. Largest Growers, Shippers and Exporters of PACIFIC COAST HOPS Offices: Salem, Oregon and San Francisco, California

Oregon Pulp & Paper Co. Manufacturers of BOND - LEDGER - GLASSINE GREASEPROOF - TISSUE

tions of prompt settlement of the British coal strike did much today to make wheat prices average lower. After frequent irregular changes, the wheat market here closed unsettled, half cent off to 3-5c up, corn at 1-8c to 1-9c gain, oats unchanged to 3-8c higher and provisions unchanged to 1-4c advance.

BOSTON, Sept. 22. (AP)--The better class of French combing is being quoted higher on the wool market, up to \$1.08 is being asked for some of the choicest offerings and in a few cases the asking price has been paid for limited quantities. Average lots of good French combing fine territory wool bring \$1.05 quite readily. There is still considerable demand for fine top making wool at around \$1.00 and occasionally small quantities can be picked up at that figure.

The Opera House Drug Store. Service, quality, low prices. Friendship give increasing patronage. Old customers advise friends to trade here. High and Court. (*)

L. A. Scheelar Auto Wrecking Co., oldest in the Willamette valley. New and used parts and equipment. Low prices and quality service here. 1085 N. Com'l. (*)

CHIROPRACTIC Is Right No one can tell you positively what Chiropactic or any other system WILL do in your case. We know what it HAS done in similar cases and if you give it a fair and impartial trial, we know what it MAY do. This is your chance of getting well. If you are wise, you will jump at it. The Health method that locates and adjusts the CAUSE of disease instead of fooling with the effect is bound to be O. K. Chiropactic Adjustments given according to a Neurocolometer reading will do you good. Try them. Remember this: The Neurocolometer Locates Nerve Pressure Chiropactic Adjustments Remove Nerve Pressure Neurocolometer readings by appointment only Dr. O. L. Scott, D.C. 256 North High Street Phone 87 or 828-1E

OIL-O-MATIC What Is It? -- SEE -- THEO. M. BARR Phone 192 L. E. DUNSMUIR Salem Wicker Furniture Manufacturing Co. We Sell Direct--Senuine Italian Quality Furniture Repairing, Reupholstering Upholstering 2215 State St., Salem, Oregon