

THE FAMILY TREE

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Number 3

CHRISTMAS

Merry

Again

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We believe that all of us in the Potlatch Forests Family can look back, as we enter this Christmas season, upon a year in which we have tried our best to meet many difficult problems. The reaction of our country to the horrible war in Europe, which has already dealt so much misery and suffering to the democratic countries over there, has been to develop a tremendous program of our own for national defense. In this program, our responsibilities as a large and important unit in our industry, are very great. The country expects us to do a good job and I believe we have tried to make good. It is a real pleasure for me to congratulate the entire organization on the showing made this year and to wish all of you a

VERY MERRY CHRISTMAS

C.

L.

BILLINGS
General Manager.



Dip Tank Installed at Clearwater Plant for Air-Dry Lumber

By BILL ARMSTRONG

A dip tank for eliminating stain and mold on dry lumber was recently made and now operated at the north end of the Clearwater green chain.

Designed by Ernie Brasch, mechanical engineer at the Clearwater mill, and installed under the direction of A. Jensen, carpenter foreman, the apparatus is treating an average of 40,000 board feet of Idaho white pine lumber each shift. This improvement was made necessary by the double shift operating with its resultant heavy cut thick lumber, making it necessary to air-dry some of the sawmill production.

Lumber pull-off from the green chain is handled by an electric mechanical swede designed to handle green lumber 4-inches thick and 4-inches wide to 4-inches thick and 4-inches wide or up to and including 4-inch x 31 inch plank.

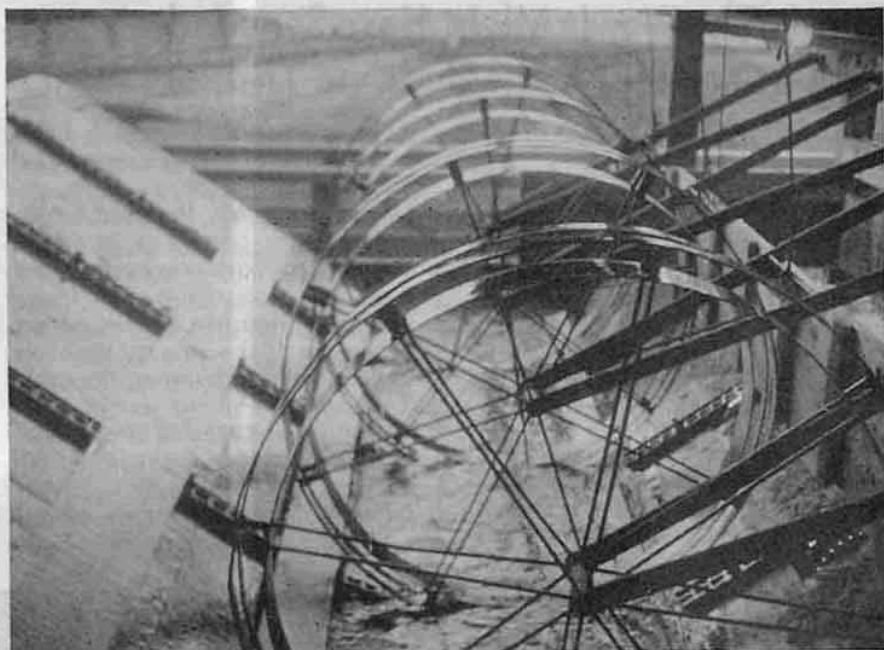
One man is required to pull boards marked for dipping 14 inches past the end of the lumber going down the green chain, and in so doing the pieces level into the swede. The bottom roll of the swede is cut by a 1½-inch pitch mechanical buttress thread. The surface speed of the pull-off rolls is 750 feet per minute while the green chain moves at the rate of 95 feet a minute. Manufactured by the Moore Dry Kiln Company, of Portland, Oregon, it is known as a type D electric swede.

Boards Are Submerged

Once through the swede a short metal-back transfer chain dumps boards into the V-shaped dipping tank. Here the lugs of another chain grab each piece and souse it through the solution. Four large steel wheels made at the Clearwater shop riding atop the chain hold down planks and boards to insure complete submersion. This same chain conveys the dripping lumber from the tank where it drops on rollers and returns to the green chain only 20 feet from the initial grab of the swede.

H. Z. White, dry kiln foreman, supervises dipping operations. Harold Myers that items dipped are those which it is anticipated will not be needed until next summer, or those items which can best be done without. A. A. "Barney" Staley, kiln mill-

40,000 Board Feet A Shift Dunked In This



Here is the new dip tank on the Clearwater plant green chain for treating air-dried lumber for stain mold. An electric swede pulls the lumber from the chain. See story in first column.

wright helper, tends to mixing the "Dowicide H" chemical used in the process. When a batch is prepared the 50-gallon mixing barrel is filled about two-thirds full of water. Into this is put 78 pounds of Dowicide. Then a one-half-inch live steam line is turned on and left on until the mixture in the barrel comes to a boil. The agitation caused by the steam blowing into the solution takes care of any stirring that might otherwise be required.

When level full, the mixing tank has a capacity of 1200 gallons; however, it is never filled any higher than the 1000-gallon mark, when preparing a mix, to avoid spilling. Inside the mixing tank a short way below the mixing barrel is a short piece of 2-inch pipe. The side of this pipe is connected, through a valve, with the bottom of the mixing barrel. The end of this 2-inch pipe is connected to the 1-inch pipe bringing in the water supply to the mixing tank from the plant drinking water system. By cracking a valve at the bottom of the mixing barrel a small stream trickles into the short 2-inch line. With the 1-inch pipe at full opening it discharges into the end of the 2-inch pipe, picking up the trickle from the mixing barrel, the turbulence mixing it thoroughly, and then flows into the mixing tank.

Ice Is Prevented

To prevent ice forming during freezing weather one loop of ¾-inch pipe has been installed in the dipping tank, one loop in the mixing tank, and a small coil of pipes was put under the pull-off roll of the swede. These all carry live steam and furnish plenty of heat to prevent loss of time from freezing. There are drain pans, drip collectors, and drain troughs so installed that any escaping solution is caught and either by pump or gravity it is returned to the dipping tank. The only lost solution is that part actually carried away by the dipped lumber.

Mr. White states that with a little experience and mechanical improvement it is expected that the tank will be entirely automatic.

New Panels Made Up

Several new panels of knotty white pine and better grades in the showroom of the Rutledge unit office have attracted a good deal of recent attention. One has been stained in walnut—and the difference is hard to determine. Another is called White Rez and gives the boards a natural color glaze. Another is in an oak finish.

All of them feel like glass.

The Laux Sales company of Spokane does the work.

LONGEST ELECTRIC CABLE SPAN IN WORLD TO CROSS SNAKE

This Is The Way It Might Have Sounded— As A Prelude To Radio Bedtime Thriller

A ONE-ACT PLAY

SCENE: Southeast corner office on second floor, Breier Bldg.

TIME: Day before yesterday.

PLACE: Local radio broadcasting station.

Enter: from door at northeast corner of office a young man full of zip races into the room, rushes to the mike, looks at his watch and says:

"This is Ken (Weyerhaeuser Pole) LaVoy reminding you that if you use Weyerhaeuser poles in your power lines you'll never have to worry about your light numbers being blown out by the Draft.

"A power span 7,000 feet long, dangling hundreds of feet over a roaring river, subject to a 60-mile-an-hour wind—the world's longest free-swinging span of electric cables—was the picture given the Weyerhaeuser Pole Company when asked to supply poles to hold this line.

"A careful check was made to determine the exact type of pole necessary. For durability the vote went to Western Red Cedar—for permanency the famous Weyerhaeuser preservative butt treatment was injected, and for size they chose two 35 foot, one 30 foot and one 40 foot pole with a top diameter of 17 inches and the diameter at six feet from the butt, or the ground-line, of 24 inches. These three features then were combined and poles meeting these exact requirements were furnished by the Weyerhaeuser Pole Company.

"The poles were carefully tested and thoroughly checked, then were taken to this rugged portion of the country, which demands the best of products and men, where they now stand ready for service—symbolic of strength and durability, beautiful in their symmetry and placed for permanency—Weyerhaeuser Western Red Cedar poles."

* * *

What is believed to be the longest free-swinging span of electric cables in the world is to be installed across the lower end of the nation's deepest gorge—the grand canyon of the Snake river, it was announced by Howard Zenier, assistant resident engineer of

the Clearwater Valley Light & Power association, REA cooperative, a Lewiston Tribune report says.

Homer G. Johnson, Portland, has the contract as part of a project to bring electricity to Asotin county members of the association.

Taking off from the established network on the Idaho side of the river, 19 miles south of Lewiston, the cables will swing between two sets of poles, 6,724 feet apart. Because of sag, however, the cables themselves will be 7,007 feet long.

Zenier said that as far as officials can determine, the longest such cables

installed previously are those across The Narrows in the Tacoma area. The horizontal distance traversed there is slightly more than 6,000 feet, he said.

Have Other Big Ones

The REA construction will be unique in that cedar poles rather than steel towers, as on The Narrows, are being used. These have been placed and the contractor is awaiting the arrival of copper-covered steel cable to complete the task. The cable is now being especially constructed by the Phelps-Dodge Copper Products Corp., of New York, and it is expected that it will reach here in time to permit completion of the job by Jan. 1.

Because its network serves one of the roughest sections to which the REA has allotted funds, the association has



WITH WEYERHAEUSER POLES HOLDING ENDS OF SPECIAL WIRE

several of such large cables slung over canyons. Now in service over Big Canyon in the Melrose area is one which until now been the largest REA cable in the nation. It has a horizontal length of 5,025 feet.

The new cable, which was designed by Robert W. Retherford, resident engineer, will cross the river about half-way between Capt. John and Couser Creek, and one-half mile below Buffalo Meadows. Poles on the Idaho side have been set up on the J. W. Crowser ranch and on the Washington side on the E. Graham property.

The terrain there has made it possible to prevent interference of the cables with aircraft which might fly up the canyon, according to Zenier. The cables take off from the top of the

REA Officials Confirm Story And Also Tell Of Precautions To Prevent Damage By Storm

canyon on the Idaho side but will drop down between two ridges toward the river, the ridges hiding them until they are below the point where aircraft would likely be operating. The cables will sag about 890 feet and will be about 500 feet off the river at the lowest point. The poles on the Washington side have been set in place about half-way up the side of the canyon.

Carry Heavy Ice-Load

Pointing to the manner in which all details looking to the durability of the span have been taken care of, Zenier said the cables, 11/32 of an inch in

thickness, have been designed so that with a simultaneous loading of one-half inch coating of ice and approximately a 60-mile-an-hour wind, they will be strained to only 80 per cent of their ultimate strength. Such conditions are not anticipated. The tensile strength is 11,280 pounds.

Although experience has shown that the long spans are too "sluggish" to permit much vibration, steps have been taken to combat any tendency in that direction with resulting crystallization of the metal in the cable, said Zenier. An assembly has been planned for each end of the cables that will keep the weight from stressing one point on the wire too heavily. The assembly also has flexible joints which, operating like the universal joint of a car, will give in any direction to absorb vibration.

Another safety factor is that the cables will swing close to the ground a few points near the top on the Idaho side, the closest to be about 40 feet. In the remote event that an extreme load would be put on the cable, it would touch the ground, thus relieving it of some of the strain, Zenier said. He explained that no harm would be done by the cable touching the ground since switches would merely be blown.

Horses Drag Cable

Explaining the proposed method for stringing a cable, Zenier said the reels will likely be set up on the Idaho side of the river, and the cable dragged down to the river by hand. A "messenger" cable will then be brought down from the poles on the Asotin county side, taken across the river in a boat and attached to the electric cable. By pulling them from near the poles on the Washington slopes, it will be possible to pull the cables across without dragging them through the water because, since that side is steep, the pulling on the messenger cable will take the other into the air immediately. It is expected that horses will have to be used for the tugging of the cable since the Washington side is quite precipitous and tractors could not be driven to the spot. "Sagging in," or the final pulling on the cable to bring it up to the required height,

(Continued on page eight)



Ed Douglas Boosted To Managership Of Ozette Timber Co.

E. L. "Ed" Douglas, for several years assistant to Mr. Rettig and more lately land agent of the company, who left last July to join the Milwaukee Land Company in Seattle, has been promoted to the office of manager of the Ozette Timber Company, it has been learned by Mr. Billings.

Going first to the office of the manager of the Milwaukee Land Company in Seattle, where he became an assistant to C. B. Sanderson, the general manager, Mr. Douglas spent some time in the Puget Sound area acquainting himself with the situations there. He had been land agent of Potlatch Forests, Inc., for about a year, after having served as assistant land agent under E. C. Rettig for several years prior to that.

The Ozette Timber Company, according to word received in Lewiston, was formed to log the cedar stumpage of the Henry & Larsen Investment Company, the Polson Logging Company and the Milwaukee Land Company.

"We have 22 miles of main line steel with connecting spurs and operate one camp of 200 men, there being two complete sides," Mr. Douglas said in a letter to Mr. Billings. "The steel was laid into the timber approximately one year ago and logging was started in August. The cedar is delivered to Lake Pleasant, one mill being a six-machine mill with a capacity of about 30,000 feet a day. The other mill, which is still under construction, is a 10-machine mill and will use approximately 50,000 feet per day. The Ozette Timber Company is under contract to furnish shingle cedar to the 10-machine mill.

"We have timber enough, with what we may buy from private sources, to last in the neighborhood of 25 years.

"The logging here is considerably different than in Idaho, as you know."

Mr. Douglas is the son of A. L. Douglas of St. Maries, field representative in northern Idaho for the Milwaukee Land Company. It is understood that while the former Lewiston man is managing the Ozette Timber Company, he is still an associate of the Milwaukee Land Company.

Prince Of Peace Hovers Over All The World As People Turn To Greet Another Christmas

Once again the Prince of Peace will hover in the hearts of men as Christmas dawns, even though millions of those men are at sword ends and more than half the world aflame.

It is about the Prince of Peace that the following story is told.

Shortly after the armistice of November 11, 1918, was signed, General Allenby, in command of British forces in the Near East, entered the City of Jerusalem, by the East Gate, riding on a white horse.

This may have been mere coincidence, but the Mohammedans saw more than that—for was not this "Allah en Bey"—The Prince of Peace? And did not the Koran say that at the end, the Prince of Peace would ride through the East Gate mounted on a white horse?

They took it as an omen for good, for peace over the entire world for all time.

They didn't know.

* * *

Once again a joyous Yuletide approaches. Schools, lodges, churches and fraternities will have their programs. In our own midst, the center of celebration is in the town of Potlatch. The following announcements are made:

In the Potlatch schools Christmas week will be observed on December 19, by the giving of an operetta entitled "The Wooden Shoe Christmas," under the direction of Ray Hinkley.

This is a story in costume of Christmas in foreign lands and will be portrayed by the pupils from the fifth, sixth, seventh and eighth grades.

Preceding the operetta a group of boys from grades two, three and four, will dramatize a human Christmas tree. Paul Tobin, Jr., will be the soloist in the chorus.

* * *

On the morning of December 20, in the high school assembly room, a one-act play, "A Sign Unto You," will be given under the direction of Mrs. Alva Bennett. The girls' chorus will sing Christmas carols.

* * *

Other community festivals will take place in lodges and churches of the town as outlined briefly below:

On December 22, at the regular hour of the morning church service in the Community Presbyterian church, there will be special numbers by the choir, including "He, Watching Over Israel," and a number by the ladies of the choir, "Sweet Little Jesus Boy."

Mrs. A. A. Segersten will sing "The Holy Child," by Martin.

The choir is under the direction of Mrs. G. P. Anderson. The Christmas sermon will be preached by the pastor, Reverend Donald R. Caughey.

On the evening of that day the Sunday school will give the program, consisting of songs by the beginners and the primary department, and a pageant, "Why the Chimes Rang," by the junior choir and the high school choir, directed by Mrs. E. M. Wygant.

On Christmas eve from 11 p. m. until midnight, the traditional candle light service will be held, with the lighting of the candles by Reverend and Mrs. Alva Bennett. The program will include "Ave Maria" by Schubert, sung by a trio composed of Mrs. A. A. Segersten, Mrs. G. P. Anderson and Mrs. Alva Bennett; the "Virgin Slumber Song" by Mrs. A. I. Alsterlund, and "The Cherubim Song," and "Low How a Rose 'Ere Blooming" by the choir.

* * *

At the Potlatch Lutheran church there will be a Christmas tree, with treats for the children, on the evening of December 23, with program under the direction of Mrs. Thomas Westby and Mrs. D. E. LaVoy. Christmas day services will be held at 11 a. m. with Ivan Vallen, the student minister, in charge.

* * *

At St. Mary's Catholic church, midnight mass on Christmas eve, will be conducted by the Reverend Fr. R. F. Zuur. The choir will sing Leonard's Mass in E Flat, with Miss Marian Egan at the organ.

Moose Bring Santa

On Saturday, December 14, the Loyal Order of Moose and the Women of the Moose, of Potlatch, staged their annual Christmas party for children of Moose families. A short program by the children, a visit from Santa Claus, a Christmas tree and treats, filled the evening.

Scientist in London Continues Journalistic Work and Research Amid Bursting Explosives

In the din and roar of anti-aircraft fire and bursting bombs, "Merry Old England" is going along as usual and there seems to be no hysteria. Rather, a slow burning anger at the nuisance of it all appears in word from overseas.

Such is the reaction one gets from a letter written to Roy Huffman by David Brownlie, eminent scientist and writer in London, who says:

"I must apologise very much indeed for not answering before your detailed letter to me of the 3rd October 1940 and thanking you not only for this but also for the photographs and the two pulls of the line drawings." (He refers to details of the Pres-to-logs machine and valley proofs of drawings).

"Accordingly," continued Mr. Brownlie, "I am going to write a special article on the developments in wood technology for *Engineering*, which is the chief engineering paper in the British Empire, and in this will make considerable reference to your work on the briquetting of sawdust, including the illustrations. Also I will see that you get a copy of the paper in due course.

"I want to thank you very much indeed for giving me this interesting additional information, all of which I have carefully noted. As a matter of fact, there are quite a number of producer gas vehicles in the world running on wood, particularly in Finland, Sweden, and I believe in China, but of course the subject is not of much interest to Great Britain because of our shortage of wood combined with abundance of anthracite. Of course charcoal is a splendid fuel for producer gas vehicles, but it has two disadvantages in most countries, that is high price and also its friable nature, which tends to give a considerable amount of dust. The best fuel for producer gas vehicles is high-grade low ash content anthracite, but in any case the subject is of interest to you in the United States because you have such abundant gas-line."

Now for the War

Here Mr. Brownlie has ended his technical discussion, and perhaps if England at the time of writing had been peacefully aware of the noise of trams and honking taxi horns, his letter would have ended in the usual manner. As it is:

"As you will be aware," he continued, "we have been having exciting times in London here and during the past three months have had nearly 100 air raid warnings, with of course a huge number of actual raids and

many bombs and other excitements, including heavy gunfire which shakes the buildings.

"However, you may rest assured that things are still going on more or less as usual in London, in spite of the widespread but unimportant damage from the military point of view, being mostly hospitals, schools, private houses, and so on.

"Incidentally, we have wiped out about 2800 German machines over Great Britain, which means a loss of at least 7000 trained men, and these unofficial government figures are grossly under-estimated, because they take no notice of the many hundreds of German planes that are seriously damaged and can never get back home again.

"I do not want to try and tell you what we are doing to Germany in return, because you would hardly believe me, but it is estimated, on the most conservative basis, that the British air raid damage to Germany is so serious and widespread that it has reduced the total productive capacity of that country by at least 20%, and I think that well over 20,000 tons of high explosives have been dropped on vital points.

"If this gang controlling Germany has the idea they are going to intimidate Great Britain by bombing London, or any other city, they can guess again, and before they have finished with this lot they will wish they had never started it.

"So far as I personally am concerned, I am going on with my journalistic and consulting work as usual, and especially with the gigantic books I have been writing for so long, as well as scientific research.

"The main point is that my family and myself, that is six of us, have to sleep every night in a deep concrete shelter at the bottom of the garden, but we have got so used to that, believe me or not, we seem to sleep better down there than we do in the house."

Blue-Back Salmon Spawn In Lake Near Rutledge Mill Flume

Probably the only fish in this part of the world to spawn in December, millions of blue-back salmon are beating the shores of Lake Coeur d'Alene and into the small streams that find their outlet in the lake.

One of the most exciting sights of the spawning ground is at the outlets of the turbine engines of the Rutledge plant on the shoreline, where water tumbles through two large wooden box flumes into the lake. Here great schools of the fish can be seen swimming toward the flumes, even attempting to leap into them over the three or four foot falls.

A few days ago literally thousands of blue-backs fought their way through shallow water toward these flumes, with the result that workmen from all over the plant came to watch them at various times during the day. At the noon hour standing room was at a premium along the seawall under the log slip.

Blue-backs are technically salmon, but according to sportsmen have become actually a trout through life in fresh water. Originally, it was said, they came by river from salt water and migrated to Pend d'Oreille lake. In more recent times many have been transplanted by the state game department to Lake Coeur d'Alene.

Due to the fact that these fish are still technically salmon, there is no state game law to prohibit fishing for salmon in any of the lakes. However, should the law be amended and the fish be legally known as blue-back trout, there might be closed seasons and limits of catch.

In the meantime, says Clare Wellman, who knows his fish and game, "the blue-backs have been taking the lakes and there has even been talk of commercial fishing for them in the Pend d'Oreilles."

All other species of salmon known to the north Pacific coast and tributary rivers spawn in the spring of the year. The only other fish in northwestern waters known to spawn in the fall of the year is the eastern brook trout, the spawn time being along in October.

Rutledge Office Cheery

The Rutledge unit office presents a real Yuletide atmosphere these days—Christmas tree and all.



Here's More About Long Span and Poles

(Continued from page five)

will be done from the Idaho side by tractors.

The Snake river cables will carry electricity into the eighth county to be served by the association, which now reaches more than 2,000 members in five north Idaho and one Washington county. About 75 isolated farms will be served at the outset in Asotin county. Construction of the 75 miles of projected electric lines there is about 60 per cent complete.

Church Party Held

The Women's Union of the Community Presbyterian church at Potlatch held the Christmas party on December 5 in the social hall of the church, the program being under the direction of Mrs. A. A. Segersten.

That Jingle You Hear Isn't All From Bells; There Are 9,480 Dollars In Christmas Socks

The jolly looking and mischievous old man peeking down from the roof above is all smiles for more than one good reason. True, he is looking for good boys and girls, but you will also note an expression somewhat of surprise on his face.

That's because 142 employees of Potlatch Forests, Inc., weren't caught short this year. They saved almost \$9,500 for their Christmas spending money. And further, the \$9,480 actually distributed this season is about \$2,000 more than was saved for the same reason in 1939.

Funds totaling all the way from about \$20 up to \$250 were handed out to the men early in the month, in each of the three units, Rutledge, Potlatch and Clearwater.

Through an arrangement with the company, those who desire to lay away a little money each month toward their Christmas spending, may do so by authorizing a deduction of that amount from their pay. There is no cost to the saver for this service. Amounts deducted this year were all the way from \$2.50 a month to \$27.50 a month. Then just before old Santa is due and when the stores are filled with tinsel and jingle, the company distributes the

saved money to the thoughtful men who had it set aside for Christmas.

That the Christmas fund at the Potlatch unit has steadily grown in popularity is evidenced by the distribution of \$4,935 to 73 employees there.

In 1936, the first year this saving system was adopted, 25 employees at Potlatch saved \$829. In the five years since, the amount saved has increased about 600 per cent. No wonder Santa smiles!

In the Rutledge unit this year 30 men saved a total of \$1,565, an increase of \$672 over that saved a year ago—and proportionately the largest savings of any of the three units for there are only around 225 men working in the Rutledge plant.

Savings fell off a little in the Clearwater unit for 1940 with \$2,980 in the pot as against \$3,077.50 a year ago. But what's a mere \$97.50? Santa may get it anyway. There were 39 employees saving in the fund, as against 43 in 1939.

At the Rutledge plant one man saved \$200—at the Clearwater plant another saved \$210, and there were eleven men that had over \$100 each coming when the money was handed out.

