





BARK-SAVER

SCREENING SAVES BARK AT CLEARWATER MILL

After many trials and tribulations, a bark extraction system has been perfected at Clearwater Unit to remove bark from hydraulic barker refuse water. Ever since the barkers started operation in December, 1950, the problem of waste removal has been acute. It required the combined efforts of a number of people to find a workable solution, notably Chief Engineer Bob Bowling, Clearwater machine shop foreman Jack Willows, engineer Frank Sule, and many others.

With the hungry saws of the Clearwater mill cutting more than 300,000 feet in an eight-hour shift, mountainous piles of bark accumulated under the hydraulic barkers. A flume has been installed to catch the bark-laden water and carry it to screens at the south side of the mill. Chutes of 1/4-inch flat steel plate guide the barker water into the 52inch diameter flume which carried upwards of 2500 gallons of water per minute. The flume also picks up all drippings from the bull chain and the dike under the front part of the sawmill. The dike may now be easily flushed with a hose, the refuse going into the flume.

Bark is carried in the flume water to an inclined metal screen outside the sawmill. The screen is inclined at 50 degrees to the horizontal and is perforated with ³/₄-inch holes which allow water to pass through, but which stops most of the bark. The arrested bark is carried vertically on the inclined screen by a flight conveyor and is dumped into another conveyor going to the sawmill hog. The individual flights of the flight conveyor are six feet long and eight inches wide, allowing ample space to transport a large volume of bark. After considerable experimentation this conveyor has been found to be the best method of handling the long stringy bark of cedar.

After passing through the inclined screen the flume water is pumped to a fine rotary screen which removes the smaller particles from the water. The screen is eight feet long and Below: Closeup of inclined screen which removes large chunks of bark from hydraulic barker refuse water. Engineer Frank Sule at right.



Above: Rotary screen and brushes which reclaim fine bark particles.

four feet in diameter, and has 50 1/16-inch holes per square inch. Refuse-laden flume water is discharged over one side of the screen at the top. The bark particles settle in one side of a tank at the outside of the rotary screen, while the water flows through the screen by gravity. A paddle about ten inches wide fastened to the rotating screen scoops the accumulating bark particles from the narrow tank bottom and carries them

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Wannigans going downstream in rough water. (Credit Bob & Ira Spring)



Amid the surge and the roar of high water, the twenty-first annual log drive started April 12 at Camp X landing on the Little North Fork. Drive foreman Joe Ross and his crew of thirty-five husky "river pigs" were charged with the responsibility of delivering millions of feet of logs to their destination, the humming saws and whining chippers of the Clearwater mill.

The drive logs, from Camps Y, X and T, spend a good deal of time in water. Flumes bring most of them to the river, where they start their rough-andtumble high water trip to the mill.



"That river water is cold . . . and wet!" (Credit Bob & Ira Spring)

The drive was completed in good time this year; on May 27 the last logs were guided into the open gates of the 300 acre Clearwater mill pond. Improved equipment, some of it designed by company men, probably had much to do with shortening the duration of the drive. Albert Altmiller of the drive crew designed a winch system which, when mounted on a boat, pulls logs into the river with a hook on a steel cable.

Altmiller's idea consists of a twenty-foot jointed boom mounted on the metal crash boat now used on the river. The boom is chained securely to some

Log jam on the north fork. (Credit Bob & Ira Spring)

River boat churning water as it pushes logs from jam to fast current.





Four hardy "river pigs" pushing a log from a jam into the river. (Credit Bob & Ira Spring)

tight jam logs and a steel cable run out from it around a lead block anchored near the edge of the jam. A "pigs foot" on the end of the cable is hooked over the ends of jam logs, and a winch mounted on the boat pulls them into the water. A 12-horsepower Disston chain saw motor is used for the power of the winch, with a friction-drive clutch added by Altmiller. The steel crash boat, powered by a 160horsepower motor, is also used to literally "push" logs from the sides of the jam into the river current.

Always in danger of a spill into the icy waters of the river, the drive logger's life is made safer by an inflating life belt that all must carry. The belt, which inflates from a CO_2 cylinder, is capable of keeping a man afloat in the roughest water.

Over the years the log drives have changed very little. It still takes brains and brawn, daring and courage, to see this tough job through. Some major improvements have been made during the last few years, however. Wannigans are now mounted on rubber pontoons instead of cedar poles, and are much easier to handle in the river. The familiar oar-powered bateaux have given way to lower, more streamlined boats powered with 25-horsepower outboard motors. The power of ten men on the oars of a bateau has been increased to that of 25 horses in the motor. The man are thus able to do their job much more rapidly and efficiently.

160-horsepower river boat used to pull logs from jams.

Securing boom from power boat to log jam. Winch mounted on boat pulls logs from jam into water with wire rope.



Four hungry river men waiting for chow on wannigan.

Four men in a power boat braving white water. (Credit Bob & Ira Spring)

River men have hardy appetites - all eating and no talking at the dinner table.





GOES TO WASHINGTON

Leo Bodine, well-known former company Public Relations Director, has been named executive vice-president of the National Lumber Manufacturers Association at Washington, D. C. For the last three years he has served as executive representative and later vice-president of the Weyerhaeuser Sales Company, St. Paul, Minnesota.

Leo began his career in the lumber industry in 1929 when he started with the Clearwater Timber Company at Lewiston, predecessor of P.F.I. Clearwater Unit. He worked for a time in the Sales Department, and later with Wood Briquettes, Inc. In 1941 he was appointed Public Relations Director of P.F.I., which post he held until 1949 when he left to work for the Weyerhaeuser Sales Company.

During his years with Potlatch Forests. Leo was very active in industry and civic affairs. He worked closely with the various state forestry committees, and had a large part in the initiation of the Keep Idaho Green movement. He was state president of the Idaho State Junior Chamber of Commerce in 1945 and prior to that was president of the Lewiston group. In 1947 he was Exalted Ruler of the Lewiston Elk's Lodge, and in 1939, president of the Lewiston Lions Club. He was also a vicepresident of the North Idaho Chamber of Commerce, and a director of the Lewiston Roundup Board, the Lewiston Chamber of Commerce, and the Nez Perce County chapter of the American Red Cross.

Leo has been very active in lumber industry organizations; since 1950 he has acted as chairman of the public relations committee of the National Lumber Manufacturers Association. He is a member of the National Advisory Committee of the American Forest Products Industries, Inc., the National Association of Manufacturers Conservation of Renewable Natural Resources Committee, and N.A.M. Committee on Cooperation with Community Leaders, and the Natural Resources and Social Legislation Committees of the U. S. Chamber of Commerce.

His long experience in the lumber business added to his natural ability of getting along with people makes a sound choice of Leo for this important position.

The lumber industry has recently perfected a new soil improver, tentatively called FERSOLIN, which is essentially sawdust, treated by simple chemical means. Preliminary tests of the soil improver on vegetable plants indicate higher rates of seed germination, earlier ripening and increased weights.

The first sawmill of the West, built in 1827 at Fort Vancouver, Washington, by the Hudson Bay Company, used a water wheel powered nuley saw which rose and fell much like a single blade of the present day gang saw.

WHITE HOUSE WOOD REVEALS HERCULEAN PERFORMANCE

The nearly completed restoration of the White House has been a unique construction job that has captured the interest of every American citizen.

The White House renovation, in addition to its broad public interest, has been very closely followed by the construction industry. This interest has been more than academic since the White House, after 133 years of use and abuse, provided a perfect "guinea pig" to determine "in use" performance of the various construction materials.

Engineers have found that the most amazing construction material performance demonstrated was the ability of wood to resist terrific abuse over such a long period of time.

Over the years the historic structure was altered to accommodate plumbing, electric wiring, elevators, central heating system and numerous other modernizations and additions. The foundations settled unevenly under excessive loads. Wood was put to many severe tests yet the wood structural timbers withstood the tests in spite of what has been revealed as an almost impossible situation.

Spectacular examples of wood durability found by the engineers include the example of the State Dining Room which when revamped in 1902 necessitated that 18-inch wood beams be cut down to five inches. These wood beams, only 28% their original size, split, but they held. They were still holding 45 years later. Performance such as this prompted W. E. Reynolds, U. S. Commissioner of Public Buildings to say, "How any timber could stand up 45 years under such treatment is hard to imagine—force of habit, perhaps."

Mr. Reynolds as well as a spokesman for the company which replaced the White House foundations have publicly declared that there was neither indication of decay in the timbers nor was a termite ever found.

One construction expert, speaking before a meeting of prominent City Building Inspectors, summed up the situation by stating, "the one thing that will always stand out in my memory (regarding the White House renovation), was how the timber in that building took the abuse it did. The way the timber in that building stood up was absolutely beyond belief."

It is indeed significant to remember that in no instance had wood failed to do the job to which it was originally assigned. Moreover, it did not fail even when the assignments were later changed without regard for the established principles of wood engineering.

"The public service would be improved if all vacancies were filled by simply appointing the best ability and character that can be found. That is what is being done in private business. The adoption of any other course handicaps the government in all its operations."—Calvin Coolidge.



A. G. "Art" Sundberg, left, and A. J. "Junlor" Sundberg, right, of Potlatch Unit.

LIKE FATHERLIKE SON

This month we continue our resume of father and son combinations working for the Company. Featured in this issue are A. G. "Art" Sundberg and A. J. "Junior" Sundberg of the Potlatch Unit. Art, Sr., has worked for the company for 28 years in almost every department at Potlatch. He has been pipe shop foreman, fire chief, and is now maintenance and construction foreman.

Art is always congenial, has a ready smile, and has a keen and warm appreciation for good work done by his men. His hobbies are gardening, radio shows and movies.

A. J. Sundberg, known as "Junior" at Potlatch Unit, started working there in 1946 as a Navy veteran. He has worked in the Pres-to-log manufacturing department, maintenance crew, time office, and at present is purchasing agent and warehouse foreman. "Junior" claims his main outside interest is fishing.

BARK-SAVER

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around the other side of the screen to be discharged into a conveyor. A set of rotary brushes clean the bark from the paddle as it discharges into the conveyor.

This very successful extraction system is being used to reclaim bark which is now vitally needed in the powerhouse to generate steam. Utilization of timber resources may never be perfect, but this saving in bark is another step in the right direction.

The all important fact that distinguishes the forest resource from most of our other natural resources—such as coal—is it's ability to grow new stand of timber as old ones are cut. **One Vote**-



By a margin of a single vote, Washington, Oregon, Idaho and California were admitted to statehood... Your one vote is important!

GOOD TIMBER

The tree that never had to fight for sun and sky and air and light;

That stood out in the open plain, and always got its share of rain-

Never became a forest king, but lived and died a scrubby thing.

The man who never had to toil, who never had to win his share.

Of sun and sky and light and air, never became a manly man,

But lived and died as he began.

Good timber does not grow in ease; the stronger wind, the tougher trees;

The farther sky, the greater length; the more the storm, the more the strength;

By sun and cold, by rain and snows, in tree or man, good timber grows.

Where thickest stands the forest growth we find the patriarchs of both,

And they hold converse with the stars whose broken branches show the scars

Of many winds and much of strifethis is the common law of life.

We wish to thank Irving "Bud" Jordan, Clearwater grader, for suggesting that we print this poem. The poet is unknown.

NORWEGIAN FORESTERS VISIT

Clearwater Unit was host on June 20 to three Norwegian lumbermen foresters, Halvor Skjelmerud, Ole Karlson, and A. Markestad. Interested in the latest developments in wood utilization, the three foresters were very much impressed with the many products made at Clearwater: lumber, Pres-to-logs, stoker fuel, veneer, box shook, industrial cut stock, glued-up lumber, and pulp and paper.

The naughty little boy was put in the clothes closet for punishment. Finally the stern but anxious mother opened the door and looked in.

"What are you doing in there." she asked.

From the darkness came the answer, "I'm thpittin' on your new hat, I'm thpittin' on your new dress, I'm thpittin' on your thatin thlipperth, and now I'm waitin' for more thpit!"

A Good Vacation Is In The Bag

If you remember to pack

Sunglasses

The outdoor life is fine, if you're ready for it—Sunglasses cut eye strain; you'll see more.

A can of foot powder saves feet; you'll hike more.

Recognize poison plants; you'll sleep more.

Sun Lotion

You can be tanner than she is—and redder, too. Gradual exposure is safer. Dips speed the process; so do "hazy" days. If you redden, you're not about to burn—you've burned.

Swim Suit

Nothing beats a good swim. But for those without webs; Quick dives can make a big hit—head on rock. It's easy to shorten a long swim—close to shore. Dips after meals may cramp more than the style.

Sporting Gear

Why overload yourself with liniment? Stick to unpacking for the first day's workout, Stagger all sports with hammock sessions. Quit if blisters bulge; not after they burst.

First Aid Kit

Check before you pack. Does it contain . . . fresh antiseptic, adhesive tape that sticks, cotton and dressings, ointment for burns, insect repellent?

Smoker's Needs

Included are matches—and matches start fires. Make sure it is out before you throw it away. Use those old tin cans for butts and ashes. Build cooking fires where they can't spread.

Proper Clothing

It's not what you forget but the overflow. To aim at a balance . . . find out what's worn . . . but note that even the hot spots cool off.

Road Maps

You'll want to map out the short-cuts, by-pass detours. But avoiding tow-trucks means a check-up before you leave, covering: brakes, steering, tires, radiator, tools, and wires.

Personal Papers

A minimum list includes: (1) Your address book (you want to write, don't you?) (2) Traveler's checks (are safer than billfolds.) (3) Identification (handy for impressing strangers.) (4) Auto papers (handy when dealing with officers.) Research Institute of America, Inc.

An enthusiastic golfer came home to dinner. During the meal his wife said: "Willie tells me he caddied for you this afternoon." "Well do you know," said Willie's father, "I thought I had seen that little boy before."



HEADQUARTERS

June has arrived and with it the beginning of the fishing season. For the last month, would-be tishermen and real anglers have been getting their equipment in order. Recent heavy rains may help the huckleberry crop, but they have made the fishing roads very hard to travel.

Most of the camps have started operation, with crews at Camps 11, 14, 58, 60, 61, 62 and T. Many inquiries have been made re-

Many inquiries have been made regarding the rebuilding of the Community hall, destroyed by fire last year. Everyone hopes the job will start soon.

Carpenters have remodeled the new First Aid shack, making it much larger and allowing accommodations for overnight patients.

overnight patients. Now that school is out, the youngsters are catching up on their horseback riding. Upwards of two dozen ponies are to be found in the Headquarters area, all of them busy most of the time.

CAMP 11

A twenty-five-man crew is operating at Camp 11, with skidding the main activity in progress. One truck jammer is skidding logs from the camp site to the road, and a hystaway is skidding for the cats. Another crew is doing maintenance work on truck roads. It will be some time before trucking starts.

CAMP 14

Camp 14 opened on May 5 with a small crew. The main work so far is road construction and rock surfacing of a new landing.

CAMP 40

Camp 40 opened May 14 with a few men working steadily on maintenance of camp buildings, roads, and telephone lines. A radio-telephone set was installed May 21. A paint crew has been busy painting the family dwellings and cookhouse.

Five gangs of saws are busy sawing logs.

CAMP 44

The crew started skidding and decking May 19. Hauling will start as soon as the unloading conditions permit. There is still some snow in the timber, but with the warm weather it is leaving rapidly.

CAMP 60

With a crew of about 40 men, Camp 60 is getting started on road and railroad maintenance. Cats will soon start skidding to the landings.

A large number of fishermen were out trying their luck on Washington Creek on the first day of the season. The fish were small and so were the catches. CAMP 61

The camp opened May 21 after a fiveweek shut down. Forty-five men are at work building landings and skid roads in preparation for next winter's logging. A crew under Oscar Carlson is building a railroad spur down Silver Creek. CAMP T

Camp T opened May 19 with 38 men. The crew is building new roads, resurfacing old ones, and repairing breaks in the flume. **D**URING the last few months construction workers have again become a familiar sight at the pulp and paper mill adding an addition to the present plant.

The present rated capacity of the pulp and paper mill is 160 tons per day, while after the expansion has been completed the capacity will be 325 tons. Additional equipment is being added

Additional equipment is being added to existing machines to provide the additional production. In the pulo mill four new digesters will be added, each of 4000-cubic foot capacity. At present there are four digesters of 2700-cubic foot capacity. Three additional bleach towers and bleach washers will be added to the existing bleach facilities.

New pressure-type brown stock washers will be added to the pulp mill which will wash the pulp much more thoroughly and reduce chemical loss to a minimum.

Through the use of the more efficient washers, waste discharge to the Clearwater river through the company's effluent line will not be any greater than under the present operation.

The machine room of the paper mill will be extended an additional 200 feet to house the additional dryers necessary to produce the new tonnage of paper. In the present paper machine there are 41 drying rolls; after the new addition there will be a total of 70 paper drying rolls. Where there is one calendar dryer now there will be four at the completion of the extension. The additional dryers will make it possible for the paper machine to run at the greater



Construction worker going aloft to work on addition to Clearwater pulp and paper mill powerhouse and recovery room.

WORKER

Going aloft to remove rigging from new evaporator in pulp and paper mill power house.

speed necessary to produce the additional tonnage of paper. A new recovery boiler will be in-

A new recovery boiler will be installed which has 50 per cent greater capacity than the present boiler. Through the use of this larger boiler, more of the unused chemicals will be recovered for return to the recausticizing system. One additional lime kiln will be added and the caustic plant will be doubled. An additional chip silo will be added and new evaporators will be installed with a third more capacity than the present evaporators. Construction work is being done by W. J. Park & Sons, general contractors of Yakima, Washington. As brought out in the April issue of

As brought out in the April issue of the Family Tree, the additional volume of wood chips needed in the enlarged pulp and paper mill will come from neighboring mills. Arrangements have been made with a number of other sawmill operations to purchase their wood waste for use in the pulp and paper mill at Lewiston.

The plant is now receiving wood chips from Potlatch and Rutledge Units in special boxcars constructed especially for the job.

Wood chips are also being received from Harris Pine Mills, Inc., of Pendleton; Kearns Company of Oregon, Pilot Rock, Oregon; Boise-Payette Lumber Company of Emmett; Hallack & Howard Lumber Company, Winchester; Twin Feathers Mills, Inc., of Kamiah; St. Maries Lumber Company, St. Maries; Lumber By-Products Company of Spokane; Ohio Match Company at Huetter, Idaho; and the Pataha Valley Lumber Company of Spalding. By the time the new addition to the

By the time the new addition to the paper mill is in operation it is estimated that a total of 30 cars of chips will be arriving daily from outside mills. This will represent a big saving in wood that would otherwise have been wasted.



This month has seen many changes in the Clearwater Unit Personnel Office. Bill Greene, Personnel Director, transferred to production work as lumber night shift foreman, while John Shepherd, Training Director, expanded his duties to include the direction of the Personnel Office. E. L. "Pink" Terlson, Assistant Training Director, was appointed Employment Manager.

BILL GREENE

Looking back on 17 years with the Company, Bill Greene can say that he has worked in almost all of the lumber departments, including the time office, shipping office, and sales office. During World War II he served as a

During World War II he served as a bomber pilot with the 15th Air Force in Europe, completing 50 missions during his tour of duty. After the war Bill returned to Clearwater and in September, 1948 was appointed Assistant Personnel Director. In June, 1949 he was advanced to Personnel Director.

An ardent fisherman and hunter, Bill has also found time to take an active part in community affairs. Bill and his wife Gladys have four children.

JOHN SHEPHERD

Replant pullers at Potlatch Unit in 1935 may remember when John Shepherd started working with them. Later in the same year John transferred to Clearwater as a moulding stock man and was soon put in charge of the moulding department.

John was the first Safety Director of the Clearwater plant in 1937. At various times he served as foreman of the fol-

GREENE— SHEPHERD— TERLSON

lowing departments: 4-Square and rebutt, loading dock, dress shed, shipping departments—night shift, and efficiency. In 1942 he was appointed Director of Training and Methods.

A thorough, analytical organizer, John has helped develop many familiar practices now used on the Clearwater plant: the colored sticker system and the method of papering car doors used on the lumber loading dock, the sytem of taking lumber inventories, and the plant suggestion system.

PINK TERLSON

E. L. "Pink" Terlson started on the Clearwater plant in September, 1929, also as a replant puller. After a year and a half he was laid off during the depression and did not return until 1934. He worked in the 4-Square department until 1940, when he transferred to the loading dock.

Before service in World War II he worked two years in the Company labor relations department. His service duty consisted of two years in U. S. Army Postal work before he was discharged in 1946. When he returned to Clearwater he was appointed Assistant Training Director, which position he has held until the present time.