

THE FAMILY TREE

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Volume XI

Number 1

Lewiston, Idaho, October, 1946

Sawyers and Sawing

It seemed a rather simple task, at first—the writing of a story concerning sawyers and sawing. A log comes up the bull chain, is tossed into one of the log decks alongside the sawyer and eventually, in its turn, reaches the carriage. A slice or two is taken off one side, the sawyer and the setter manipulate a few levers and push buttons in a most nonchalant manner, the log rolls over, the steam nigger whams it into place, a few more slices are cut off, there is conversation between sawyer and setter in sign language, the log gets kicked around some more by the nigger, a few more slabs come off, and gazanti—she's all lumber and we are ready for the next log.

BUT, it's not quite that simple. First, there's the matter of taper, which produces an exception to what you may think a natural law. The large end of a log isn't always as large as the smaller end—unless proper correction is made for taper. All lines of cutting must be parallel to the knees or blocks of the rig and straight from the eye of the observer through the log. The result is that the small end of a log (when log is in position on carriage for sawing) falls partially outside the larger end because of the difference in diameter of the two ends. You don't believe it? (Well—there will be further explanation next month with drawings.)

QUALITY AND QUANTITY

Then there is the matter of getting quality and quantity from a log with the goal that of securing the greatest dollar return from each log. The center of a log, normally, makes up into lower grade lumber than does the outer area and this must be considered in determining when best to turn the log for canting off the outer area down to the lower grade center. Thus the natural grades of lumber can be produced from a log and separated. All boards will show a uniform grade across their width to the limit that any type of cutting will allow.

HOWEVER... such canting requires a greater number of cuts, more turning of the log, results in narrow width boards as compared to outside diameter of log, increases sawing costs since more trips of the carriage are necessary to reduce logs to lumber. For instance, by canting a log, let us say, No. 1 grade can be obtained in widths of 6 and 8 inches as contrasted to No. 2 grade which can be obtained in 12-inch width with less canting—and the No. 2 grade in 12-inch width returns more money per thousand feet of lumber. There is also more of a demand (assuming this for the sake of illustration) for the No. 2 grade in 12-inch width. All of which means that some



Cutting a big one at Clearwater.

fast mental calisthenics are necessary as each log goes to market—via the sawyer.

A BIT CONFUSING

Actually, of course, all the sawyer has to do is balance best possible grade that can be obtained in any width against other grades that can be had in wider widths, compare respective prices, divide this by number of operations and turns of log required, consider inventory of lumber already on hand, multiply by customer's order and law of supply and demand, and pay some attention to sawing instructions received from the boss. This, compounded with a bottle of Pluto water, always gets an answer of some sort.

The predicament of the sawyer is pretty well summed up in the opening paragraph of an opus prepared by former Clearwater mill superintendent Jack Frisch for presentation to those crazy enough to develop a yen for sawing—quote: "In drawing up this paper, it is realized, at the very start, that it is impossible to make any hard and fast rules concerning the sawing of a log of any type; much depends upon the judgment of the individual sawyer and existing circumstances. We must, then, consider the following as suggestions only; suggestions which may be followed in cutting a certain log—

(Continued on page 4)

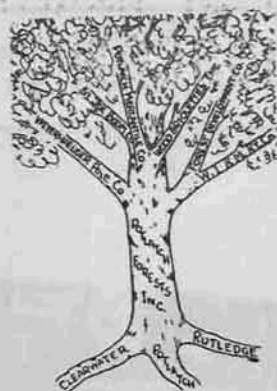
Key Man

The lumber industry, by developing a process which carries the product to the workman for each successive step in manufacture, pioneered straight line production in America.

The sawyer has always been the key man in this process and probably always will be. Improvements in machinery and technique have been many and important but nothing so far discovered has diminished the basic requirements of the sawyer's job. Constant attention, quick judgment, fast coordination are today more important than ever.

C. L. BILLINGS,
General Manager

THE FAMILY TREE



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History Is Made Slowly

A hundred years ago, in 1846, there appeared in a Missouri newspaper this advertisement:

"State of Mo., county of Pike, to whom it may concern, the undersigned will Tue., Sept. 28, 1846, sell at public out-cry for cash on premises, where Coon creek crosses Mo. road, cattle to-wit: 6 yoke of oxen with yoke and chain, 2 wagons and beds, 4 buck niggers, 3 nigger wenches, 3 nigger boys, 3 prairie plows, 25 steel traps, 1 barrel of pickled cabbage, 1 hoghead tobacco, 1 lot nigger hoes, 1 spinning wheel and loom, 3 fox hounds, a lot of other articles. Am gwine to Californie. FREE head cheese, apples and hard cider."

Humanity has come a long way in a century! There is little reason to believe the pace will slow and no good cause to despair of a peaceful world simply because all the differences between nations, many of which have existed for centuries, have not found solution in the first year of a United Nations Organization.

The milestones of history have been few indeed that were not at least partially obscured during the day of their occurrence by calamity howlers and prophets of doom.

"So your husband is one of those big guns of industry?"

"Yes, he's been fired seven times."

MAN OF THE MONTH

A veteran of World War II, who might quite appropriately also be called a Rutledge veteran, gets the nod this trip for "Man of the Month."

From back of his desk in the time office, adjoining the shipping office at Rutledge, Roger Carlson administers the triple duties of personnel, safety and time keeping. His quarters, new at Rutledge, are panelled in knotty White Pine, are comparatively spacious, and could well serve as model for any office.

Roger first began work at Rutledge in 1935—graded moulding and drove bug. In 1936 he became time clerk and moved to the downtown office, working at this job until 1942 when Uncle Sam crooked a long forefinger his way and said "give me a hand."

Followed six months in the infantry then transfer to the air corps and officer's training at Maxwell Field, Alabama, Ft. Meyers, Florida, and San Marcos, Texas. A commission as 2nd Lt. came his way on Jan. 13, 1945, then quick shipment to Westover, Mass.; Charleston, So. Car.; Boise, Ida.; Salinas, Calif.; Hamilton Field, Calif.; and finally overseas to the Philippines, Okinawa, Japan and Korea. The six months following V-J day were spent in Korea and the thing best remembered about Korea by Serviceman Carlson is that he never wants to return.

In Japan Carlson saw Nagasaki, scene of atomic bombing, and well remembers the devastation which in appearance was like a great fire, leaving twisted steel girders sticking up out of the ground and all else in ashes. Also had a look at Mount Fuji, sacred mountain of the Japs.

A hobby? Well, yes. . . . "My hobby," quoth our man of the month, "is to keep my house from falling down. It's built of Rutledge Retail Yard lumber you know." So, we moved on to another subject.

Favorite sport—football, but was an excellent golfer at one time (the records say so, Carlson doesn't.)

Best remembered happening in Korea—so many things happened, there were so many strange customs, that to single out one more important than any of the others isn't possible. A recent letter from one of the Koreans that worked for Carlson while he was supply officer is interesting and furnishes some idea of the people:

18 Sept. 46.

"Dear My Friend Mr. Carlson:

It was five months snice I saw you last, how are you, thank you I am very well and my family is all very well also my brother Doo Young are very well too. I am still working at 8th Sig. Opn. Bn. now that station situate by near the east-gate do you know that place. I am very sorry you left here in Korea, I am at a loss how to act. As you know the Lt. Batty (provost marshal) he introduced job at near my home, of course I have to thanks him. He is my best friend, manly man nice-style etc. I like to have good time again somewhere in Seoul. My brother Doo Young Hyun and my sister are very anxious to see you even the picture or in dreaming. They like to see your civilian style picture as soon as you successful. As it were I like to have once more big party at my home as you can. Today I found your address so I will send a letter for you. My brother works fathers



Roger Carlson . . . Rutledge

watch shop now. Do you know interpreter Mr. Song he is working 7th division now still has same job and works very hard. I like to have civilian style shoes. Can you send a shoes as soon as possible, it is better 9½ size any form any colour. Can you do that? Starting cooling from this month take easy and you take a close attention for health. May-be cold next month, give me a glad or happy news make haste now. Above I believe you, this letter that first I typed how do you like it. Have you a Capt. Blatts address I want to know. Where is he now. Otherwise I am going to marry end of this year or first next year I am very cheerful and so sorry because I cannot invite you. Even the God knows my sad condition, if I were a bird I would fly from here to there. I will send wifes picture when I get marry as soon as I can. Don't worry, never waite long time, how many children you have now? I like to know. Last night I went to the Cinema with my girl friend name was (Tall in the Saddle) was very successful. I think actor is John wete I am not sure. Sometimes send me a letter. This letter some GI send to you very sorry I want to see answer take easy good-bye.

Your friend,

Hyun, Moon Young."

This rather intriguing arrangement of words by Hyun, Moon Young doesn't in the least damage his letter nor hide the sincerity of a genuine wish for the welfare of U. S. Lt. Roger Carlson. We share his wish, along with a great many other people.

Mother: "Jimmie, how dare you kick your little brother in the stomach."

Jimmy: "It was his own fault, he turned around."

* * *

Most men work about one-quarter as hard as they say they do, and about one-half as hard as they think they do.

* * *

We sometimes talk as if "the gov't" were something away off somewhere—a Santa Claus or a Satan, according to whether we like what it's doing. But the gov't is all of us who pay taxes and who benefit from the services we expect gov't to provide.



Knotty Hobby

No, it's not "Lena the Hyena." This is only a collection of knots, clustered together in a piece of genuine Idaho White Pine. The collector of such odd bits of wood is Walt Jardine, Rutledge grader, who calls this one "Baby Face."

Walt has many other pieces of boards with unusual arrangements of knots, but none quite so startling as this one. The collecting amounts to a hobby and has been pursued over a period of years. Another Jardine hobby is writing and we hope to receive a sample of this hobby in the not too dim and distant future.

Anybody else have a knotty (or naughty—we don't care) hobby that The Family Tree should note?

From the Readers Digest

In the period before D-Day when the U. S. army was moving into scores of camps throughout the British Isles, an American colonel was making an inspection tour of locations under construction. His chauffeur was an attractive young member of the Motor Transport Corps, British women's auxiliary service.

The places they visited were in varying stages of completion and the comforts of home were not much in evidence. At every site the driver looked in vain for some sign of ladies' accommodations. As the day went on her discomfort increased and finally, when they were on their way back toward headquarters, she brought the car to a halt at the side of the road. Murmuring an embarrassed "Excuse me," she got out of the car, walked down the road a few hundred feet, and disappeared into the woods.

She emerged a few minutes later and, eyes fixed demurely on the ground, walked back and got behind the wheel without saying a word. Still making no pretense at explanation, she drove the 50 miles back to headquarters before she made a startling discovery: the colonel was not in the car.

From Jack McKinnon

An answer to why the simple souls from the forests do not more often visit the city and risk the perils therein may be found in the experiences of two such simple souls at this year's Jamboree, October 5th.

These two s. s. first attended the football game at Pullman as a preface to the actual Jamboree, held later in the day at Potlatch.

Said A to B (names on request) after the game, "How do you drive from Pullman to Potlatch?"

Replied B: "I know the way, just follow the Spokane road until you reach Palouse, then turn off."

With thoughts of free Coca-Cola and a meal awaiting their arrival in Potlatch the two s. s. set out. Time passed, towns passed and their speed approached that of sound. But, no matter what the speed, Palouse would not appear . . . that city being located on another highway. The two s. s. clattered through Colfax and rattled their way past Steptoe, Thornton and Rosalia. At Plaza they stopped and inquired as to the where-

abouts of Palouse—were set on the right road and finally arrived in time for Pepsi Cola and dinner, but their chagrin was great and painful.

The two s. s. felt they had learned a lesson in geography the hard way, but the evening was young and the major catastrophe of the day had not yet overtaken them.

After the Jamboree they set sail again, taking care to ask the way, and in due course of time reached Lewiston. A few miles outside the city limits, A stopped the car, turned to B and said, "Drive for me. I'm getting sleepy."

"Sure, glad to," was the response. So B got out and walked around the car while A moved over in the seat, then deciding to get out for a—ah—a stretch. While A was in the middle of his stretch B sat himself down beneath the wheel, calmly engaged the gears and drove away.

Gentle readers, prepare to shed your tears. Here stood A, the hour past midnight of a dark night, with a cold wind blowing and him without an overcoat. He waited five minutes, he waited ten minutes and then, because his temperature was approaching what is known as an iso-thermal state, started for town, bed and warmth.

Meantime B journeyed up river to Peck, about 35 miles, addressed himself to A, received no answer, stopped the car, discovered to his horror—A wasn't present. Returning, B discovered A in the Bollinger Hotel, and, it seeming the better part of wisdom to await a new day to argue the happenings of the preceding one, quietly bedded down alongside.

Thus ended the saga of the two s. s. from the forests who came to the city for a day that will long be remembered and talked about.

From Bob Binger

"As you probably know I'm now employed by the Minnesota & Ontario Paper Company which has mills in northern Minnesota and in Ontario, Canada, as the name implies. My initiation into the company commenced with a three-month orientation course designed to familiarize me with all the main office departments such as sales, advertising, etc., all the mills and manufacturing processes used and the woods operations in the U. S. and Canada. The result of the training course was that I learned very little when it is compared with what there is to learn about the paper business

but I was thoroughly impressed with the opportunities that do exist to become more acquainted with all the difficult phases and problems encountered in such an industry.

The state being the largest owner of timberland in the state, it is imperative that we work in close cooperation with them at all times. At the present I'm working with them in preparing a management plan for about 300,000 acres in the northern part of the state. Aerial photographs were used to acquire the information on timber types, timber volumes and the location of pulpwood stands. This type of work will consume most of my time for some months but eventually I hope to do more work in the production phase of the business as related to forestry."

Federal Land

There are approximately 3 million acres of land in Idaho, but only 2 per cent of this area is in private ownership and subject to taxes for state and local government, according to Earl W. Murphy, secretary to the Idaho State Chamber of Commerce.

At a recent meeting of the Boise, Idaho, Lion's Club Murphy stated, "Approximately 66 per cent of the land area of Idaho is in federal ownership and control today. Something over 25 per cent is in private ownership, a little more than six per cent is owned by the state and about 1.4 per cent by the counties.

"The record shows that in Idaho approximately three per cent of the total land area passed from private to governmental ownership in the four-year period between 1940 and 1944.

"Can we produce enough taxable wealth on a shrinking area of land surface in Idaho, which today is about 25 per cent of the total, to carry the increasing cost of government for the state as a whole?

"Is there any economic justification for a program of continued federal acquisition of land?"

Murphy pointed out in conclusion that the total receipts from forest service revenues for the fiscal year ending June 30th were not an appreciable amount of the total tax revenues.

Rotary See Lumber Films

Two sound movies, made available by the Western Pine Association, were used as a program for the Moscow Rotary Club on October 21st by J. J. O'Connell, Potlatch Unit manager.

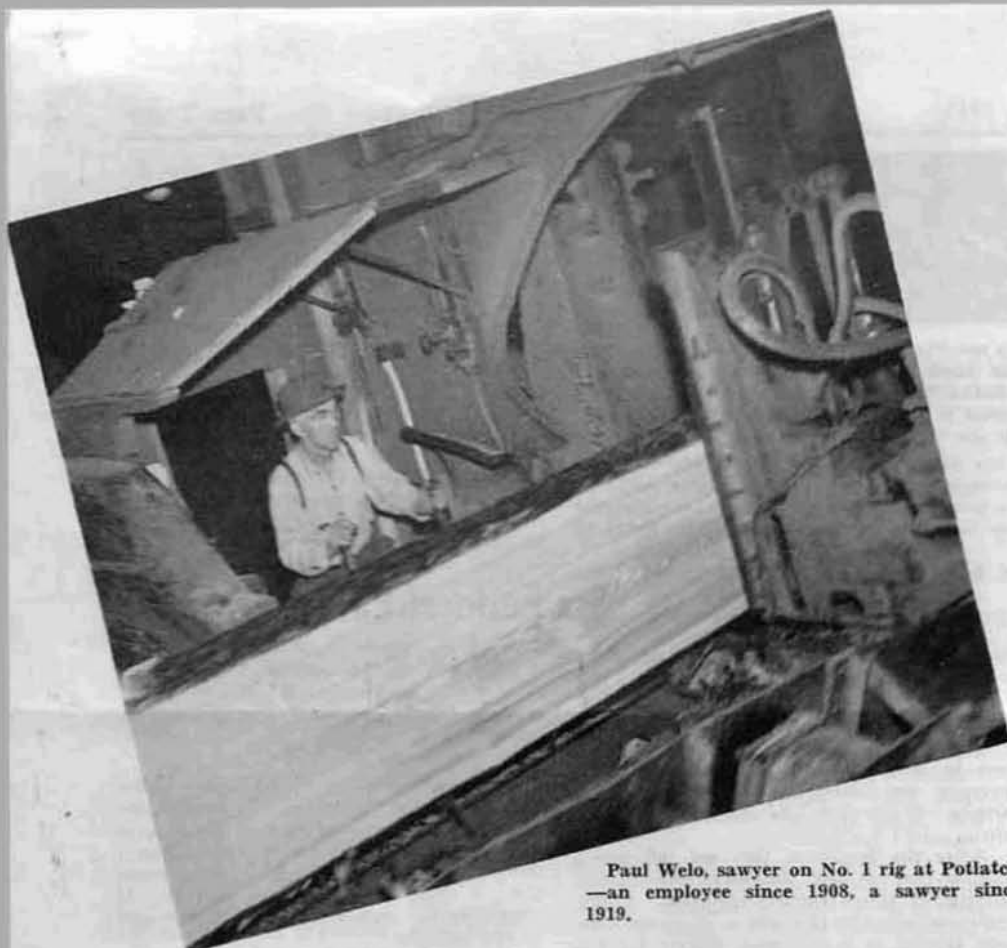
One of the films dealt with logging and sawmill operations in western pine forests, the other showed construction of a home—from pine lumber (naturally). The two films ran forty minutes in all, with Potlatch School Supt. Bernard Hopwood assisting in their showing.

The sign said it was a safety zone, so she drove in!

* * *

Small boy writing answers to a psychology test: "Your legs is what if you ain't got two pretty good ones you can't get to first base, and neither can your sister."

Sawyers



Paul Welo, sawyer on No. 1 rig at Potlatch—an employee since 1908, a sawyer since 1919.

(Continued from page one)

or which may be entirely abandoned, as best suits the situation."

To continue, the sawyer must give thought to what effect drying will have on the lumber he cuts, else he is going to have trouble with the dry kilns foreman. Shrinkage in flat grain is nearly twice that in edge grain. In a piece of lumber that has both sap and heart wood the sap shrinkage is greater in both quantity and speed while the heart wood, comparatively speaking, has a tendency to stay put. Boards which cup because of stresses created through different rates of drying for edge and flat grain—heart and sap wood—are undesirable. So, Mr. Sawyer, ponder this factor also in your consideration of how to best convert logs into merchantable lumber.

Oh, yes, another thing—crooked logs. Well, a crooked log should yield as great a footage as a straight log if the difference between the diameters of its ends equal twice the crook.

Enough is enough! From this point onward the story is that of the two sawyers who hold greatest seniority at Potlatch, oldest of the P.F.I. mills, and where—by calculation of Manager J. J. O'Connell—some 24,007,654 logs have climbed the bull chain in the last forty years. In 16-foot lengths this would give a mileage of 72,750 miles—enough to girdle the world almost three times.

No. One Rig--Potlatch

By PAUL WELO

In 1908 I came to Potlatch from Grand Forks, N. Dak., and prior to that time had never seen a sawmill. Mark S. Seymour (father of Mark Seymour who is now head electrician at Potlatch) was superintendent

and John J. Meyers was sawmill foreman. I began work in the sawmill on June 10 of that year.

My first jobs were carrying water, watching the lath to see that they did not get plugged up in the chute, short pocket man, picking edgings on No. 1 and running the slasher. By the time of the first World War, I was spare man on the carriages and was employed at such work when airplane stock was cut for England. We barked the logs then shipped them. They were manufactured into wing beam stock on the other side.

There was an interval of army duty, following which Meyers offered me a job as sawyer on the night shift in June of 1919. All the rigs at that time were single cut and when they returned empty after a cut

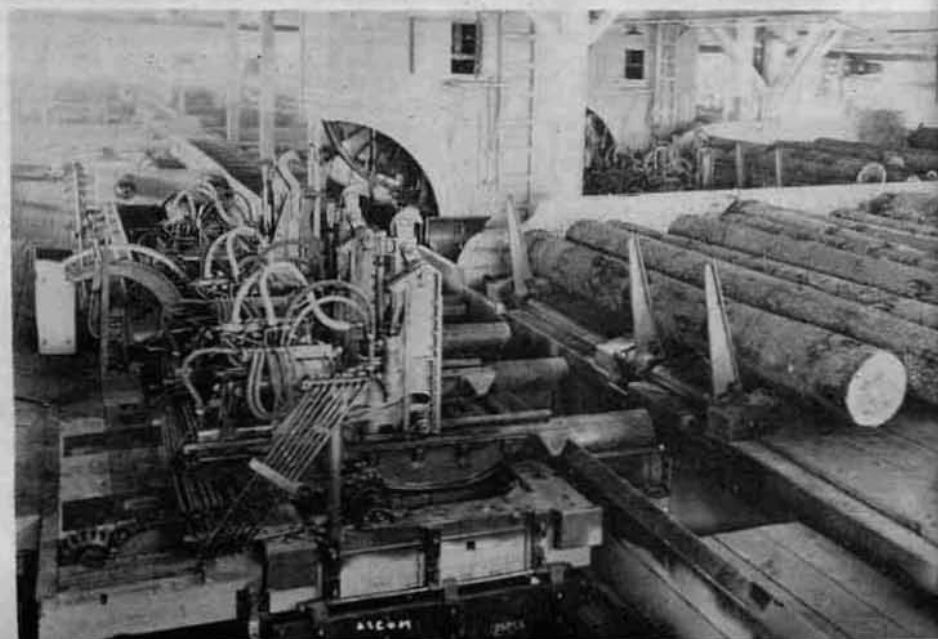
it was not unusual for sticks, slivers, etc., to take the saw off the arbor. The rigs are now all double cut and are much less hazardous.

The No. 1 rig at Potlatch is our "long" rig. Here, orders for anything that exceeds 24 ft. in length are cut and logs 34-36 feet in length can be handled. In the sawyer's box the buttons are all on the right side, excepting two that control the guides. There is a button to signal the deck man to pull logs down. Three buttons control the deck rolls. Another button signals the button pusher that a cant is coming for the gang. There is a button to signal the saw filer when his services are needed (a few teeth are sometimes damaged slightly by dirty logs, rocks, or a bit of metal and the filer can fix them without removal of the saw). There are two water valves on the left hand side, which throw water on the outside of the saw which is against the log, and on the inside which is against the wheel. This is done to cool and clean the saw when it gets hot and pitchy. The sawyer handles the lever which controls movement of the carriage with his left hand and the nigger control with his right hand. The two buttons that control the saw guides are fitted into the tops of the levers that control carriage and nigger. The sawyer operates them with his thumbs.

One of the things that a sawyer must do is to train other men to saw. Among those whom I have trained are Anton Giannou and Emmett Utt.

There has never been a serious accident to my rig nor to any of the men who work on it. We did have an exciting few minutes in 1944 when some small fragments of copper lodged in the valve that controls the shotgun under the carriage. Fortunately this happened while I was pumping out the shotgun and warming up the oil preliminary to resumption of work after the lunch hour. No one was on the carriage. The control valve was opened, letting in a steam pressure of 130 pounds to the square inch or approximately 11,000 pounds on a 12-inch piston. As the carriage neared the opposite end of

This picture taken at Clearwater in 1927 before the first log was cut. Note difference between carriage equipped with air operated dogs and the hand operated dogs of carriage No. 2 at Potlatch (right).



d Sawing

the 40-foot track on which it operates it became apparent the valve was not closing. The carriage smashed into the bumper at the end of the track and shattered four 8x14-in. timbers and one 14x14-in. These all had to be replaced. It was later discovered that the stray copper came from a by-pass valve in a steam line from the boiler room.

There are many true stories about carriages that have escaped control and torn the end out of a sawmill, causing injury to men and damage to mill property. The July, 1944, incident was close enough to that sort of thing to satisfy me.

No. Two Rig--Potlatch

By DEWEY LAVOY

The number two rig at Potlatch has a steam setworks, converted to air. The dogs are mechanical and are hand operated as contrasted with air operated dogs on rig number one. This means a second man riding the carriage to set dogs and he must have a marvelous sense of balance to do the job. The rig is a right-hand rig, with controls arranged accordingly.

I first started sawing at the age of 19 years at the Potlatch Lumber Company's plant in Elk River. Since that time there have been many changes which have spelled greater safety for the sawyers. As an example, we now have better protected guards on the saw levers and timbers are built higher around the sawyer so that there is less likelihood of a log coming cross ways from the kickers and striking the sawyer. Safety glasses are also a great help as several sawyers have lost an eye because of a knot hitting them from saw or nigger.

In the early ways we were expected to stand. We worked ten hours a day and would stand on first one leg then the other. Finally we made stools and would half sit, half stand, kicking the stool to one side whenever the boss appeared (the setter was trained to signal us of the arrival of the boss). Nowadays we sit down all the time and can do better work.

Sawing seems to be second nature to some people, but is exceedingly difficult for others.

Dewey E. LaVoy, sawyer on No. 2 rig, Potlatch. Began work in the lumber industry at the ripe old age of 14 years ... in Bonners Ferry for Jack Frisch as a cleanup man. The following year moved to Elk River. At 19 was given a sawing job. Transferred to Potlatch when the Elk River mill closed.

It is not unusual for a sawyer to have to quit after a year or two and find other employment, because of nerve strain, and I have seen men sicken and faint when riding carriage. A nervous person should neither attempt sawing nor setting.

A good steady gait with the log always in the saw is the thing that produces most lumber. A helpful thing for a sawyer is to have graded lumber in the planer and also rough lumber. It is my opinion in cutting big logs that select should be cut as far in as it goes before turning the log. First, you have to open the log, as you would anything else, to see what is inside. The sawyer calls it "opening the log" when he takes off the first slab. There is more emphasis on quantity at present than during years of less demand for lumber.

The two hardest grades for a sawyer to get out of a log are D select and number one common.

In the days of the single cut saws it was a common occurrence to pull a band saw off and watch the fire fly, but no matter what happens the sawyer has to stay and hold the rig from getting away. The crew can get off the rig, but when an accident happens such as the band mill wheel coming loose, it is all over so quick that there is no use trying to run away.

Each shift starts out with a newly sharpened saw, morning and noon. Sometimes a change is necessary during the shift as saws become dulled by dirty logs or from striking something in the logs such as nails, bul-

lets, etc. The average time for changing a saw is around four or five minutes.

Naturally I feel pride in the fact that no one has ever been hurt on my rig and that a number of setters have been trained here and have become good sawyers, among them Andy Olson and Cliff Woodward.

The old saying that one is "never too old to learn" certainly applies to sawyers. It takes years of experience and anyone wishing such work should start when young. Good coordination is a must.

Both Welo and LaVoy remember barking Idaho White Pine logs for shipment to England during World War I. The wood was used in the manufacture of airplanes.

Below—Spyridon Chillispos, tail sawyer, number two rig at Potlatch. His job is to make certain slabs and lumber go down roll case and are headed right for edger. The mask is of heavy wire mesh to give protection against splinters, flying bits of bark, etc.



Left—Setter John Gains, an employee of the company for 27 years, and Homer Kras-selt (employee since 1935), on number two carriage, Potlatch. Both men "dog and set" on carriage, changing each hour.



Tussock Moth Attacks Latah County Woodlands

By VERN RAVENSCROFT, Extension Forester, University of Idaho

Throughout Latah County and in portions of adjoining counties, there can now be seen large numbers of Douglas fir and Grand fir trees that look like well-picked chickens. Nearby, white pine, spruce and even some of the underbrush have the appearance of an overgrazed service berry. These skeleton trees stand as mute evidence of the defoliating ability of the Douglas fir tussock moth.

In the immediate area tributary to Moscow and Potlatch, there are approximately 250,000 acres of timbered land that show distinct evidence of serious tussock moth damage. In small areas of critical infestation, a large per cent of the stand has been completely defoliated. Aside from salvageable cordwood, the forest resource on these critical spots has been lost.

Fire Hazard

These same areas will constitute a serious fire hazard for the next few fire seasons. Across the entire 250,000 acres, many trees, including some pine, have received sufficient crown damage to set back their height growth from ten to fifteen years and to promote the development of crooked crowns, many forked leaders, and wolf trees.

The Douglas fir tussock moth represents a serious threat to northern Idaho's timber resource. The critical area is concentrated in and around Latah County, but small localized outbreaks of the tussock moth have been reported from numerous places throughout the Inland Empire. There are two means for control of this pest: the first is natural parasitism; and the other, mechanical control by the use of airplane dusting with DDT.

Life Cycle

Before the limitations of either of these methods can be thoroughly understood, the life cycle of the tussock moth should be made clear. According to a memorandum recently issued by James C. Evenden, Forest Entomologist with the Bureau of Entomology and Plant Quarantine, Coeur d'Alene, Idaho, the life history of the Douglas fir tussock moth is briefly as follows:

The Douglas fir tussock moth spends the winter in the egg stage. These eggs now can be found in clusters along the twigs and branches of the trees in infested areas. The eggs hatch coincident with the new growth on the tree, usually the latter part of May or the fore part of June. The small caterpillars, upon hatching, are only about 1-12 inch in length. During the feeding period they grow to 1-1/5 inches in length. They favor Douglas fir or any of the true fir species as a host. However, in areas of severe infestation, the caterpillars will eat on foliage of all ages; also on other evergreens and on some of the underbrush species. The caterpillars enter the dormant stage soon after the first of August, depending, of course, upon the altitude, exposure, etc. They remain in the dormant pupae stage for about ten days to two weeks, after

which time the adult moths emerge to complete the life cycle.

The female moth is wingless; she has only two short rudimentary stumps of wings; she is covered with dense hairs which are gray to fawn at the base and black at the tip. As many as 122 eggs have been taken from one female. The male is larger and has well developed wings. The primary wings are dark chocolate brown in color, but have two irregular dark bands. The secondary wings are a dusty brown color, with dark margins along the sides. The female is very inactive and almost invariably lays her eggs on top of her own cocoon. Because of the inactivity of the females, and because of the feeding habit which takes the young caterpillars to the top of the tree, it is felt that the major spread of this insect is caused by wind movement blowing small caterpillars from one area to another. Temporary experiments indicate that during the first stages, the small caterpillars can be carried considerable distances with a wind velocity of as little as ten miles per hour.

Natural Enemies

There are many natural enemies of the tussock moth. Our native wasps, in particular, are known to feed on the caterpillars and to parasitize the pupae. Epidemics are probably created when, for some unknown natural reason, these enemies become unable to keep the moth in check. The degree of natural parasitism will determine the over-all extent to which mechanical control will be necessary next year. A study of parasitism is now being made in the Moscow vicinity. In one area the probable infestation has been reduced by 93 per cent. In another area the potential hatch has increased several hundred times. This survey is not yet complete, but so far it seems to indicate that there will be some areas in which mechanical control will be necessary.

DDT Dusting

There is no experience in the mechanical control of tussock moths other than the dusting with ground equipment using DDT on specimen trees. This type of control has proven very satisfactory. We all know, of course, that airplane dusting with DDT was very successful on the Coast in the control of the Hemlock looper. Because of the similarity in feeding habits of these two insects, there seems to be little question that airplane dusting with DDT will prove entirely successful as a mechanical means of controlling the tussock moth. In making any decision as to whether or not a dusting program is necessary on any particular area, it should be kept in mind that the dusting program will destroy many of the natural enemies of the tussock moth as well as the moth itself.

The best Forest Service estimates available indicate that a large dusting program would cost somewhere in the neighborhood of \$1.75 per acre. If it proves necessary to dust the entire 250,000 acres of infested lands in Latah and adjacent counties, a

What is the life cycle of a Tussock Moth?

What Means of control are there? Is Forest Pest Control Act needed?

trainload of fuel oil, several airplanes, and thousands of pounds of DDT will be involved. This will undoubtedly be the largest dusting program ever undertaken.

A large percentage of the current infestation is on small private holdings, mainly farm woodlands. The remainder of the infestation is in a forest area of intermingled state, county, industrial and federal forest holdings. Any mechanical control undertaken should provide for 100 per cent coverage. Uncontrolled spots are a potential threat to adjacent lands. The ownership pattern is so complicated that the expense of the over-all undertaking is extreme. There are many public interests at stake such as watershed protection, fire prevention, etc. Obviously any control program will have to be a cooperative or public venture. Some public financing will be necessary under any arrangement.

Pest Control Act Needed

It is lamentable that we do not yet have a cooperative forest pest control act which would legalize a program of the type described. If we are to be organized to cope with the tussock moth, in case a mechanical control program becomes necessary, the first step, of necessity, will have to be the passage of a cooperative forest pest control act. The efforts of farm groups and forest industry leaders will be needed to crowd such an act through Congress in time to have a program ready for mechanical control of the tussock moth next June. June of next year is mentioned because the first few days of the caterpillar's life constitute the period when mechanical control is most practical.

Years ago 48-inch circular saws, driven by "four horses walking around," were used in Western states.

* * *

The first sawmill in America was built at the Falls of the Piscataqua on the line between Maine and New Hampshire in 1634. There is some dispute of the date as unauthenticated reports mention sawmills in New York State in 1633.

* * *

Two little boys were astride a none-too-large hobbyhorse. Things eventually came to the point where one little rider said to the other: "If one of us would get off, I could ride better."

* * *

*Of all sad words in sound or ink,
The saddest are—"I didn't think."*

* * *

Death is a stiff penalty for carelessness!



GARAGE FROM LAMINATED ARCHES

Six of the eight foot laminated arches now in manufacture at Potlatch were used by ex-serviceman Newell LaVoy to build himself a garage. Over the arches went a layer of 1x6-in. shiplap, then a layer of 90-lb. apple green roofing felt. The finished job adds up to a very good garage at little expense—the occasion lent itself well to an old fashioned "barn raising," thereby solving the problem of construction labor and keeping the cost down to \$120 for materials.

Newell is setter on the number one rig at Potlatch.

Huffman Criticizes Krug Report

Portland, Oregon, newsmen, in an interview with P. F. I. Assistant General Manager Roy Huffman, got an earful October 25th on the subject of Secretary of Interior Krug's advocacy of a Columbia Valley Authority which Krug asserts is based on a report that will be submitted to congress this winter.

"It is regretful that the secretary fails to take the people of this region into his confidence," said Huffman.

"CVA, according to provisions of the Mitchell bill, will have benevolent power to subsidize those who support CVA and despotic power to put out of business those who oppose it.

"It is inconceivable to me that CVA advocates would adopt the program and technique of the socialists to accomplish their objectives unless they wish to gain additional power over the people.

"Many organizations in Idaho have gone on record by resolutions opposing CVA legislation. These organizations stand 100 per cent for progress, but they want such progress based on sound American principles according to plans which are now in operation.

"These plans have been worked out by established government agencies in cooperation with citizens of this area; they have accomplished excellent results in the development and utilization of our natural resources here in the Pacific northwest; they provide for even greater accomplishment in the years ahead."

It is not enough to be busy; so are the ants. The question is—What are we busy about?

* * *

Drudgery is as necessary to call out the treasures of the mind as harrowing and planting those of the earth.

Guess Who?

A certain amount of feuding is a fine thing and makes good reading. So—in full knowledge that the following will provoke a rejoinder in strong language—"who is he?"

Clue 1—Has a scholar's mind. Was able to give intense concentration to studies while in school. Graduated from Gonzaga University.

Clue 2—Was a football player and thus earned necessary concessions to make school years possible. Thrusts jaw forward when talking, scowls menacingly, is tough, spits on hands, uses profane language and expresses himself with sizzling metaphors.

Clue 3—Has sensitive skin. Developed allergy to chemicals used in engineering department—probably had similar allergy toward soap when a small boy.

Clue 4—Was a wrestler and can grunt and groan quite convincingly. Even looks like an athlete. Almost won men's race at last Clearwater picnic by using elbows.

Clue 5—Has a delicate stomach and gets car sick. Vomits with little provocation or warning.

Clue 6—Can eat anything and will. Also enjoys liquids.

A man(?) of contradictions.

Who is he? . . . Correspondent Cut Ep-ling says its Phil Reimnuth, foreman of the dry kilns, Clearwater.

Bowlers Organize

Two bowling leagues have again been formed at Clearwater (the third year for competition between teams from different departments about the plant.)

President of the ladies' league is Rita Pratt; vice-president, Augusta Robinson; secretary, Pearl Gupton; treasurer, Dorothy Stillman. There are four teams in the league. High bowler to date is Faith Erickson with an average of 164.

President of the men's league is Elvin Olson; vice-president, Bud O'Shaughnessy; secretary, Earl Bullock; treasurer, Russell Kirsch. There are eight teams in the league with leading averages as of the moment—Jim Sibert 162, Leo Moore 161.

A rather interesting sidelight on the sport of bowling concerns its origin and first appearance in this country. The sport was first known to the early Greeks some 7000 years ago and was brought to this country by the Dutch in 1623, and was outlawed in several states when it was found that some of the bowlers were prone to wager on the total scores.



BIG LOG AT CAMP 40

An Idaho White Pine tree was felled at Camp 40 in August that measured more than seven feet across on the stump and scaled 5650 feet for the butt cut. Sawyers Oscar Bergman and Gunnar Grassberg did the felling with an eight-foot saw . . . they must have had a right lively time getting this one down, but then the loading crew also had trouble with it and the mill won't be able to handle it "as is" either.

A sign reading "Visitors Hours—1 P. M. to 4 P. M." now appears at the Rutledge gate where little more than a year ago a small house sheltered an armed guard.

Visitors are welcome at all of the mills. Hours at Clearwater are 10 A. M. and 2 P. M., Potlatch permits visitors in the morning up until 11 A. M. and in the afternoon from 1 P. M. until 3 P. M.

Cafeteria Progressing

Construction of the cafeteria at Clearwater is progressing at a fast pace with the roof and sidewalls in position and most of the equipment on hand to outfit it.

Bud Jones Back

October brought another veteran, Sgt. Bud Jones, back to work from places in the Pacific. Bud is foreman of the stacker at Clearwater. Welcome home.

TEN YEARS AGO

In The Family Tree, Volume 1, No. 1

From General Manager C. L. Billings: "This newspaper, if it can be successful, will come, in time, to be a big help in getting us all closer together. And so the management very sincerely wishes—Good Luck and a Long Life!"

Noted: "Elk River mill, closed down in 1930, being dismantled. Mill was built in 1910, cut its first log under supervision of Andrew Bloom, had three single-cut band saws, a rated capacity of about 125 M per shift."

Offered: "Ten dollars for a name with which to christen the infant publication."

Complimented: "Safety Program at Potlatch and signs about plant... one of which read 'It's Hell to be a Cripple'."

Organized: "A new safety promotion program at Clearwater under direction of the plant's employment office."

Frolic: "Rutledge employees held their annual labor day picnic... chartered the Flyer and Miss Spokane to carry them across lake to Camp Easton... later used the Miss Spokane for an evening's dancing out in the lake."

Woods News

Headquarters

The 1946 hunting season really started with a bang at Headquarters. Seven thousand hunters were said to have checked through Weippe before the opening day and there have been many more since that time.

Early in October the weather was clear and cool and the woods dry and noisy, giving the game a big advantage. However, the boys from Headquarters made an outstanding showing despite the handicaps. Boots Edelblute scored again. Earl Ritzheimer has quite a story to tell about the big bull he got—claiming two-thirds of the animal weighed 565 lbs. (Sounds like a lot of bull.)

Vaughan, Chrystal, May, Nyberg, McFadden and Ashley were among the first successful hunters.

Camp 14—Beaver Creek

We're still going strong with a crew of ninety men. The trucking season is over, but cats are still skidding to the railroad. There is no snow so far, but we're keeping our fingers crossed and if this weather holds out we expect several more weeks of logging.

Some fine deer and elk have been bagged in this vicinity.

Camp 54—Washington Creek

The weather was excellent during the first half of the month and we operated at peak production.

The Albers sisters from Portland are the latest addition to our flunky staff and very easy on the eyes, if we may be allowed to

IT'S HELL TO BE A CRIPPLE
= Watch your Step =

Sign at Potlatch... self-explanatory and furnishing some excellent advice.

say so. But, with this bit of good news comes the bad news that our cook, Charlie Faxon, is leaving. We'll really miss him!

Camp 55—Lower Alder Creek

Preparation for winter logging is progressing rapidly. Knute Hove and his boys have come over to get the railroad in shape. The added activity, plus the expected arrival of Phil Peterson's crew within the next couple of weeks has been creating the excitement normally experienced in anticipation of "things to come."

Camp 56—Moose Creek

We now have seven power saws in the woods and results are gratifying for our new venture in this type sawing.

With the hunting season in full swing, this camp sounds a bit like the landing on Okinawa. Hunting fever has cut our crew down somewhat, but it also serves to relieve the meat shortage and eases the strain on the pocketbook.

Our crew now totals 11 including 37 men sawing and bucking. Clerk Tom Rauch was stricken with a sudden illness early in the month and was taken to the hospital at Lewiston. Ken Williams, formerly at Camp 55, is filling in for him.

Lawrence McManus has acquired the responsibility of saw boss and is doing a fine job.

Camp 57—Breakfast Creek

We haven't been heard from recently, but we're very definitely a "going camp."

September proved to be our best month so far, with over three million feet of logs loaded and sent on the way. However, Camp Foreman Geo. Rauch hopes to better this figure in spite of the bad weather predicted.

Our saw boss advises that one of his Blue Ribbon gangs—Eric Lindholm and Eric Erickson—have cut and bucked over 1½ million feet since last April. Your correspondent doesn't know if that is a record but would like to hear some figures from other "high powered gypos." The saw boss also mentioned a gang that cut nothing, but he was mumbling and the details escaped me.

Safety Theme of the Month is well expressed in H. L. French's CORENCO NEWS under the title "Sing While You Drive":

At 40 miles per hour sing, "Highways are Happy Ways."

At 50 miles per hour sing, "I'm But a Stranger, Heaven is My Home."

At 65 miles per hour sing, "Nearer My God to Thee."

At 85 miles per hour sing, "Lord, I'm Coming Home."

Hunting is the favorite topic of the day. Many of the boys have been out and almost as many have returned with very vague accounts of their failures. The camp foreman showed up Monday morning with a smashed lip and a dandy story of how a deer kicked him. He had the deer for evidence, but then we've also heard of people walking into half open doors.

Camp 59—Meadow Creek

Construction of roads and landings still going full speed ahead.

Camp 60—Washington Creek

With winter setting in this camp was deactivated and ceased to operate as a unit on the 15th of October. All the personnel of the camp, however, have transferred to Camp 55 and will continue work there. Until next spring then, this is Camp 60 signing off.

Camp 58—McComas Meadows

Joe Broneske is the man of the month at Camp 8. Recently, and without previous experience in high diving or piloting, Joe used his Peterbilt truck to make a one-point crash landing into the canyon.

Joe was driving down the Meadow Creek road enroute to the Stites landing, and when rounding a turn his load bunk-bound. Joe, the B-5, and several thousand feet of timber hurtled over the embankment. Fortunately the wreck came to a halt within fifty feet and although the driver's side of the cab was crushed against the steering wheel, Joe escaped with only a slightly sprained little finger!

The 6 Billion Dollar Question

If communism and socialism are so wonderful (as many people would have you believe) then why does the largest and most experienced communistic country in the world (Russia) and the largest socialistic country in the world (England) have to come to this capitalistic country to borrow money?

America is the only major country where people have been able to produce enough for their own wants and have a surplus. The countries with the "more abundant life" want and seem to need that surplus.

Doesn't it look as though this capitalism is something so good we had better keep it? If we think so, we had better act like it, for there are many things going on here that will (and are intended to) kill capitalism.

And there won't be ANY country WE can borrow from.