THE FAMILY TREE

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Pres-to-logs Patent Issued For Product By U. S. Government

"To all whom these presents shall come"—No. 2222250—patent for the Pres-to-logs product, the most important patent yet to be issued to the Pres-to-logs industry, has been received by Wood Briquettes, Inc., dated November 19, 1940.

Good for 17 years, the patent issued by Conway P. Coe, commissioner of patents in Washington, D. C., covers all previous patents in importance because it is the recognition, by law, of the right of Wood Briquettes, Inc., exclusively, to the product known as Pres-to-logs.

There are seven patents now in force on developments of the industry, five on the machine and certain improvements since it was first made. The first patent on the machine was issued in 1933 and others in 1935. Next in importance was a patent issued in 1935 on the method used in making the fuel briquette, or Pres-to-logs. However, still another patent was necessary to give Wood Briquettes, Inc., the protection it needed, and the product patent is it.

Under the federal law, all patents are good for 17 years. This places the product under that protection until 1957, and, it is explained, even though the 1933-35 patents on machine and methods will run out by 1950-52, the patent on the product itself remains in effect another five years.

Herbert E. Smith, patent attorney of Spokane, Washington, who has been instrumental in the securing of the other patent rights for Wood Briquettes, Inc., made the necessary search and filings with the U. S. patent office in Washington, D. C., and in a letter received from him, referring to the patent on the "product," he says: "I am confident that you will find this patent comprehensively covers your fuel briquettes as manufactured and will be during the life of said patent an absolute bar against any infringement on such a product as outlined."

ALADDIN RUBS HIS MAGIC LANTERN AGAIN; NEW PRES-TO-LOGS STOKER FUEL ENTERS MARKET, RESULT OF LONG EXPERIMENTATION

At last! The perfect stoker fuel has been developed by Potlatch Forests, Inc.

Imagine having an automatic stoker in your house and not having to go down to the furnace room every morning to clean out the clinkers.

Imagine a stoker fuel that leaves practically no ash.

Imagine a stoker fuel that is really clean when it is delivered in your basement.

Imagine a stoker fuel that in burning does not leave a lot of soot to clog furnace pipes and flues, and a fuel that will not send out that pernicious film of greasy dirt that will have to be cleaned off the walls.

Imagine a fuel that has no puffing of fly ash and gas to permeate the basement and house.

Imagine a fuel without the obnoxious smell caused from hopper gas.

Sounds perfect, doesn't it? And it is—as perfect as human engineering can make it. It's called Pres-to-logs stoker fuel.

But this is purely sales talk, as it is intended to be. There is quite a story behind it. First, a description of the new fuel, a development of the Pres-to-logs department and the engineering skill of one Robert T. Bowling.

This new fuel is put together much like the Pres-to-logs, except that it is chopped into cubes, or lumps, about one inch in dimensions, comparable to the usual automatic stoker coal that has been burned these many years.

The idea of producing this fuel was proposed in 1939 by Roy Huffman, after we had been unsuccessful in several attempts to develop a stoker to satisfactorily burn regular Pres-to-logs.

"Such a fuel would also give us something to sell to the large number of fuel users who possess coal stokers," said Mr. Huffman. "The sale of these stokers has been increasing rapidly these last few years and we wanted to find a fuel made of wood that could be burned in the stokers as successfully as coal."

The first experiments were started August 1, 1939, when an Iron Fireman domestic stoker was set up at the Clearwater plant by Mr. Bowling. The

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Another New Product

This issue of *The Family Tree* might well be called a "Pres-to-logs Number."

Distribution of the original product in log form has now reached the point where several very large areas are covered and many unique uses have been discovered.

Now we are bringing out a new product—Pres-to-logs stoker fuel which, it is already apparent, is to have an enthusiastic reception.

Many new jobs have been created in manufacture and distribution in our own organization and more will doubtless follow in other places.

It seems to me this is a fine announcement to be able to make at this time of the year and I am proud to be able to make it.

C. L. BILLINGS,
General Manager.

There have been several other attempts by other people to make a wood briquette.

Success of this company in the past several years is recognized as a stimulant to others to attempt the same thing.

The patent on the product itself protects the company from such infringement.

Often it is easier to do a good job than to explain why you didn't.

THE FAMILY TREE

Published by Potlatch Forests, Inc., Once Monthly for Free Distribution to Employees.

Editor ..... Sid C. Jenkins

Correspondents

Jack Eaton ..... Rutledge
Bill Armstrong ..... Clearwater
Mable Kelley ..... Potlatch
Carl Pease ..... Headquarters
Chet Yangel ..... Bovill

"He has a right to criticize who has a heart to help."

Down the Editor's Alley

Every once in a while one of the fellows interested in *The Family Tree* comes through with a good story. There are several on tap right now that will appear in future issues. If you know something about somebody, or about something somebody has done or is doing, why not let the editor know about it? It all helps to keep *The Family Tree* a real live publication.

* * *

We hate to do this—but—what a shellacking the University of Oregon gave Oregon State College! Now, both of those schools are a long ways away from the center of interest of Potlatch Forests, Inc., except that our former employment manager at the Clearwater plant, Bob Evenden, is a professor at Oregon State. Do we anticipate a letter from him saying to please go to ——! Well, after all, we got one like that once before.

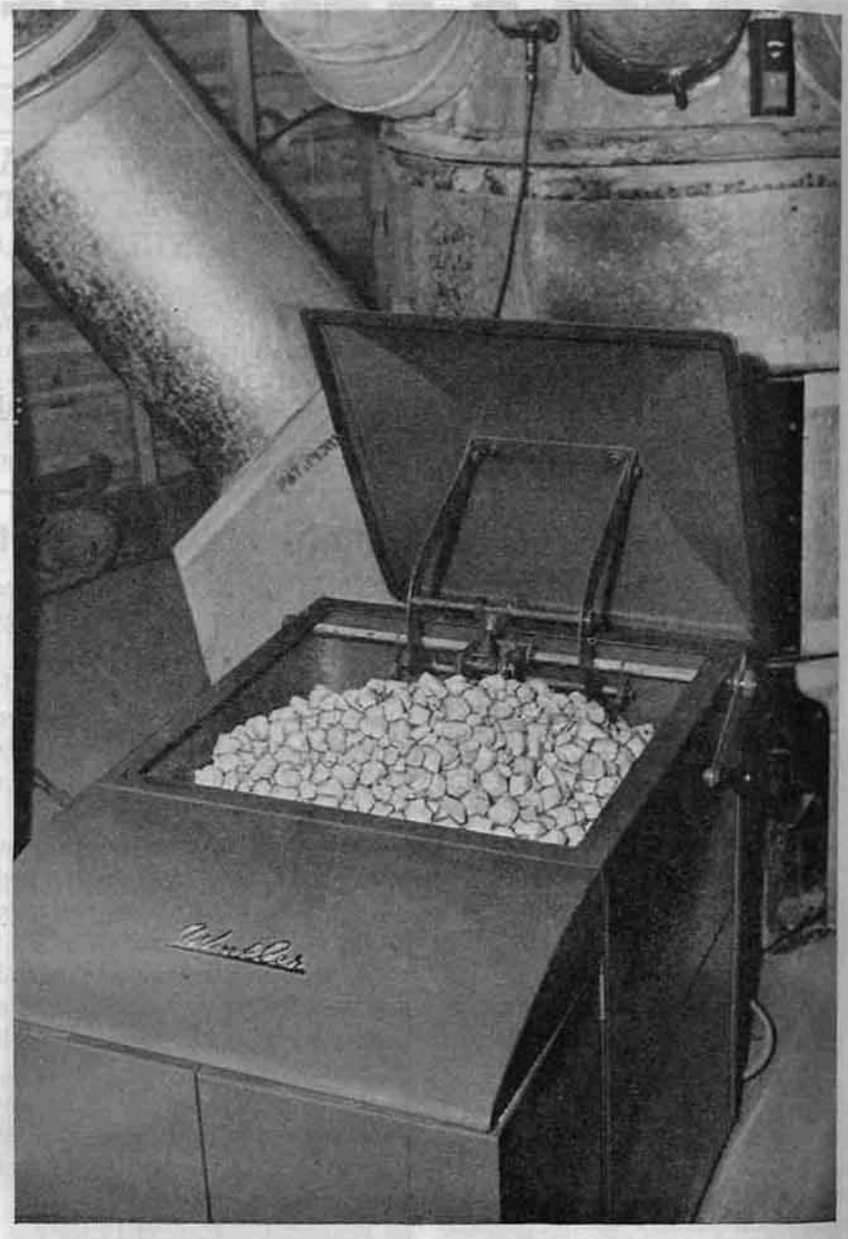
* * *

Spike Baker writes from Pittsburgh that he's still alive and kicking, and doing something every minute for Idaho white pine.

* * *

Famous last words—"Please write."

At Last—The Perfect Stoker Fuel!



Here it is—the perfect stoker fuel. This is a picture of the new, clean Pres-to-logs lumps working in a domestic stoker designed for burning stoker coal. The lumps are poured into the hopper from sacks, the same as coal. The difference is that there is no dirt, soot, clinkers, gas fumes, and practically no ashes. The above scene is typical in that this new fuel may be used in any of the different stokers on the market. Several executives of the company purchased different makes of coal stokers to help with the experiments and are using this new fuel regularly now.

Here's More About The New Stoker Fuel

(Continued from page one)

fuel burned in this stoker was obtained by breaking up the standard Pres-to-logs into small pieces.

"This method of making fuel," said Mr. Bowling, "was satisfactory for the experiments, but obviously too slow and expensive for production. With this factor in mind we began to think of ways and means of producing the kind of fuel we wanted on the standard Pres-to-logs machine.

"Our first effort in this direction was to make a die with a number of dividers in it to divide the regular

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And Here Are The Hands That Made Them

The candid camera man of The Family Tree took this picture to show the hands that reated the answer to a housewife's prayer, and also to show how nice and clean the new res-to-logs stoker fuel really is. These are the hands of R. T. Bowling, holding some of he first Pres-to-logs stoker fuel ever made.

(Continued from page three)

res-to-logs into several parts. This e was made the same diameter and ngth as the standard dies in the die heel of the machine, and had nine visions. The outside of the log was vided into eight parts and there was one and a half inch round core in the nter.

"The theory was correct, except that e die was too long, the large surface ea creating an excess of friction in nsion and exceeding the power bility of the screw and tip-head to ss the material through the die. any event, the cost of installing dies this type in the entire wheel would prohibitive.

"Since our first die had proven im-acticable and had to be reduced in ngth, a better idea was to install the e in the cone housing where its length uld be changed, and one die could rve to fill the standard dies of the heel, and thus we could operate the achine as in making regular Pres-logs.

"This arrangement made excellent terial, as in forming the log, the terial was forced through the short vided die directly ahead of the tip-ad nine parts and then into the dies the big wheel. The separate pieces would flow together just enough to allow handling of the log when it was pushed out of the die wheel.

"While this method looked promising, it had some features that were not desirable—mainly, that of having to break the log into desired size for lumps that would go into a stoker, and which would require still another operation. Also, if we used this method, stoker fuel could not be made any faster than the regular Pres-to-logs.

"At this time a serious problem developed concerning the strength of the die used to divide the material. It was found that the nine divisions made pieces too large to feed in the screws of the average stoker; and, in making a die to produce 11 or 12 divisions, the obstruction to the flow of the material was increased, with a consequent increase of the load, or strain, on the steel webs which formed the dividing lines of the die. One die after another failed in operation. A number of steels and alloys were tried, most of them with discouraging results. Finally a die was fabricated with "18-8" (18 parts chromium and 8 parts nickel) chromium hard drawn stainless steel, which is giving satisfactory results.

Concluding that to make the stoker fuel on the standard Pres-to-logs machine, whereby the logs would be divided into sections of the desired size but longitudinally in the same proportion as the regular Pres-to-logs and requiring a breaking process as a separate operation after the log was formed, would be too expensive for the production of this kind of fuel, Mr. Bowling began to figure ways to form the material and break it up in one operation. This thought too was to eliminate the die wheel with its index mechanism, the pressure holding cylinders and all the controls of the standard machine.

"To accomplish this," he continued, would require more pressure and heat than normally required for making standard Pres-to-logs. To obtain this end we used a newly developed double-headed feeding tip which gives a three-stage compression of the material. With this new head more pressure and heat is applied to the material in a given time, pressing, plasticising and setting the material at a higher rate.

"With this set-up it is possible to form the logs in the desired pieces and cut them off with a mechanically synchronized knife blade in a continuous operation at the rate of 16 tons per day, as compared with 12 tons per day for the standard Pres-to-log machine."

The new fuel is in cubes, or lumps approximately one-inch in size and its density is about that of the regular log. It weighs 36 to 38 pounds per cubic foot. It may be fired through any standard coal stoker.

"It has no clinker, almost no ash and is the cleanest solid fuel in existence," concluded Mr. Bowling. "We feel confident that it will take its place along with the best of fuels in serving the public, for all heating purposes, both domestic and commercial."

To this Mr. Huffman adds:

"Pres-to-logs stoker fuel has answered all the problems. It has been developed and thoroughly tested through actual use in several different makes of stokers at present on the market and is now ready to be offered to the public for the comfort and real enjoyment everyone should get from a stoker."

Prices compare very favorably, in Lewiston, with those of the regular Pres-to-logs. As an added feature, it will be delivered in sacks, making the filling of the hopper simply a matter of dumping in a sack or two.

A slight adjustment must be made on the stokers to reduce the volume of air flow and give maximum efficiency.

FIRST AID AND SAFETY GO TOGETHER—ACCIDENT PREVENTION STRESSED: TOM SHERRY AND PAUL BLACK SPEAK IN PHOENIX

Clearwater Plant Experiences Retold At Western Meeting

By TOM SHERRY

First aid's place in lumbering fills the same niche as in any other industry. In every industry any type of injury may occur, making a general knowledge of correct treatment and correct handling important.

There should be no doubt about the value of extensive first aid training among the personnel of any industrial unit. From the standpoint of accident prevention alone it is worth enough. The man taking a first aid course begins to realize what causes accidents, what the consequences are, and most important of all, how these things may happen to him if he is not on guard.

The safety program and the first aid program are interlocked, one helping the other. Another great value of training men around the industrial unit is the insurance that it gives against criminal mishandling of injured persons. The uninformed man will invariably get an injured associate up on his feet, see if he can walk, then if he can't throw him in a car, gently, of course, and rush away to the hospital.

In cases of serious bleeding, death stalks at the brink if there is no one to take charge who understands the control of that bleeding. What a world of satisfaction there is in getting a report from the doctor in a case of serious injury that the handling has been just right, and that the patient has been placed in his hands in the best possible condition.

First aid training is fully as beneficial to the individual as it is to his employer. In this reckless age of "get there quick" any one of us may often come to the situation where knowing "the immediate temporary treatment to be given in case of accident or sudden illness, before the services of a physician can be obtained," is important. Then through first aid we learn more about the protection of our own welfare, and that of our family. The workman finds out what infection is, and how important cleanliness is, and why. The benefits of this training are numerous, and mutual.

The Talks

In these columns on either side of this box are the talks, in part, given by Tom Sherry, safety supervisor of the Clearwater plant, and Paul Black, safety engineer of the Workmen's Compensation Exchange, at Phoenix, Arizona, last month, before the Western Safety Conference.

First aid and safety men attended from all points of the west, including the Canadian province of British Columbia, where the lumber industry thrives.

Space does not permit printing the complete address of either of the men who were in Phoenix as representatives of Potlatch Forests, Inc. However, enough of their talks is given to carry home the message these men gave their conferees.

There are many methods of making first aid training available. We have about 20 trained instructors at our Clearwater unit in Lewiston, and our experience is that they bid for the opportunity to conduct or assist in new classes.

One stumbling block is poor understanding of the Wage and Hour law, which is not entirely clear as to what the status of an instructor is. We have been held back in our training courses because of this.

If the regular class periods cannot be arranged, shorter periods, held more often, will be found effective. At our plant in Lewiston last winter a young man employed as first aid attendant on the night shift conducted 20 minute classes each night during the lunch hour, and completed two classes of first aiders, giving us 28 more men on the plant with that training.

Where regular class periods are prohibited by conditions, as is often the case in our logging operations, plenty of good methods present themselves for the dissemination of first aid knowledge. It may not be possible to complete courses and issue cards, but at least the important phases of first aid training can be taught to large groups of men at opportune times. In

(Continued on page five)

Woods Operations Featured In Effort To Reduce Hazards

By PAUL V. BLACK

The subject as assigned to me of putting safety in truck logging is one I particularly appreciate, due to the fact of the importance that trucks are playing in our modern logging.

To show just how far-reaching in its importance to the modern day method of logging this goes I might cite the operations of the Potlatch Forests, Inc., whose logging operations reach an average of 2,000,000 man hours a year in logging. This year, up to the first of October, about 63 per cent of their logs have been transported either in an entirety or in part by truck. I do not think there is a doubt that at the present time they are the largest truck operators in the Pacific Northwest.

A study of statistics has proven to us that in the logging industry not over 2 per cent of our accidents can be attributed to the failure of mechanical devices or power. The failure of the man element has been the predominating factor in accidents. I am citing this to bring out that as we have advanced in our methods of operations from the old river drive and ox team, etc., in which our two controlling factors of accident prevention would have been entirely the man hazard and the natural hazard, we have advanced into a mechaical age.

If we are to continue to keep abreast, or to keep ahead in accident prevention work we are going to have to pay more attention to the mechanical feature and less to the injury. It has been the common practice in the past that when an accident happened, with an attending injury, the injury has been reported, noted as to cause but little has been done to control the main factor or the accident. Our present day modern methods of accident control are rapidly stressing the point that time and proper medical care will do all that can be done for the injured; that if we would continue to show advancement in the prevention of injuries we must apply our control and our efforts to accident prevention.

Truck logging has become the last

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Here's More About Tom Sherry's Talk

(Continued from page four)

e woods, where intensive first aid ining is impossible, no opportunity uld be passed to inject some first d into every meeting and gathering. The actual application of first aid inciples to injuries on the job, especi- y those of a minor nature, is a gold ne of accident prevention. At the earwater unit of Potlatch Forests, c., in Lewiston, we ran the full gamut experiences in trying to find the best thod of applying first aid treatment small injuries.

At first open medicine chests were cated at various points on the plant, d each man administered his own atment and took the medicine in e cabinet as the whim seized him. pplies were always running short in e boxes, miles of adhesive tape dis- peared, but the infections developed ely. Then, not so much to prevent fections, but to save supplies, the binets were provided with locks and key given to each foreman. Still this dn't work, and the development of dangerous infection case that got its rt from a small neglected sliver owed that steps must be taken to ke the early first aid treatments fective.

The doctor had always made a visit the plant at noon of each working y, and a room was reserved for his e. This room was stocked and fitted our central first aid room and a ined attendant placed in charge. om then on the safety rule was put to effect that every injury, irrespec- e of its severity, must be reported this station within a short time after s inception. We now set the time mit at one-half hour until an in- ction is charged against the indi- dual and his department. By this eans we have changed our infection perience from the former average of er 20 cases causing lost time each ar to the low average now of only e or two such cases.

Three outstanding points of viola- n present themselves. First is the g, tough guy who knows he is not bject to infection. No little thing e a germ can get him. Often the only ay to win his cooperation for his n personal welfare is to wait until e does get the infection, then bear own. On our plant that bearing down gets plenty of assistance from the personnel.

The second type of first aid rule infraction is the type of individual who fears ridicule, feeling that he will be considered a "sissy" if he reports injuries for treatment.

Complete misunderstanding is the third important cause of first aid rule infractions on our plant. This type has the feeling that his foreman will criticize him if he leaves the job for minor treatments. This is simply an indication that we failed to get the significance of our first aid rule over to him.

Every new man is conferred with before he starts to work about all of our safety efforts, and the thing given the most emphasis is this rule.

Often a man will ask me, "You mean to bring a little sliver over in the middle of a shift? That wastes a lot of time, don't it?" I agree with him that it is costly, but assure him that the management considers it time well spent, and compensated for by the cost of infections that might occur. Our foremen know the value of this early treatment, even in the slight injuries, and criticism comes not to the man who complies with the rule, but to he who fails in that compliance.

Magazine Publishes Dave Troy's Address

How materials are handled in the Clearwater plant of this company at Lewiston, told in a talk given before the American Society of Mechanical Engineers at its fall meeting in Spokane recently by Dave Troy, is a story published in two national magazines of late date.

Mechanical Engineering, published by the society in Easton, Pennsylvania, carried the story following Mr. Troy's address on the program. It was also carried in the current issue of The Timberman, published in Portland, Oregon.

Another paper given at the society meeting by R. T. Bowling, is expected to appear in a future issue of Mechanical Engineering.

Potlatch Mercantile Company has begun to feature its Christmas stock of wares, at Potlatch. Some of Mr. Ferguson's wooly neckties caught the fancy of one whose weakness is pretty neckties.

Another Railway Line Is Using Pres-to-logs

Add another railroad to the growing list of transcontinental and other lines using Pres-to-logs in their dining car kitchens, says Roy Huffman.

This will be the Chicago & Northwestern Railway, serving middle western states such as Illinois, Wisconsin, Iowa, Minnesota, South Dakota and Nebraska. First order for Pres-to-logs for this line was received a few days ago, following a trip east made by Mr. Huffman.

Pres-to-logs have been in use on the Union Pacific Streamliners and Challengers over transcontinental routes for some time past, as they have also on the Olympians of the Chicago, Milwaukee, St. Paul & Pacific; on the Northern Pacific between Seattle and Portland and Seattle and Spokane; and more recently on the Chicago Rock Island & Pacific railway, serving that country from Denver east to Chicago, and down in some of the southwestern states and into Texas.

U. S. Army Will Use Pres-to-logs Fuel

By far the largest order ever received for Pres-to-logs has been approved by the war department for fuel at Fort Lewis, where thousands of northwestern men are and will be in military training during the coming few years.

Marking this as also the first large order for Pres-to-logs by the war department for military (other than CCC) use, Harry R. Bidlake of Longview has announced the securing of a contract calling for 4,285 tons of the fuel.

Shipment to the army encampment is from both the Longview and Everett plants of the Weyerhaeuser Timber company. The logs go by train from the two west coast plants to the railhead at Fort Lewis, from where they are being distributed by truck to the various sectors of the camp.

In addition to the Fort Lewis order, Mr. Bidlake has also advised that the army officials at Fort Stevens, near the mouth of the Columbia river, where coast defense mobilization is also taking place, are using 250 tons of Pres-to-logs per month.

Here's More About Paul Black's Talk

(Continued from page four)

word in log transportation and gives us an excellent opportunity to practice accident prevention. I am going to offer for your consideration a four-point program of accident prevention in truck logging based on the fundamentals of logging: First, equipment; second, upkeep or maintenance; third, methods of operation; and fourth, but not least, personnel.

Going into the heading of equipment, I must say that a careful selection of the equipment from the standpoint of what you expect it to do, is one that involves economy as well as safety. We might use this as an example—if the nature of your loads require two wrappers as a safety factor, then have it definitely understood that two wrappers are required on every load.

Under maintenance, I feel that carries one of our best opportunities to advance safety in trucking. Not in trucking alone, because effects on all of the other parts of the operation will be in order. If you will investigate a logging show that has trucks with mashed fenders, lights and bumpers knocked off, cabs caved in, and protectors either missing or broken where they are required, chains "haywired" and all these little incidental things that go with that type of a show, I think you will find on further investigation that the accident record on that show is about like the equipment . . . not so good.

Potlatch Forests, Inc., put into operation 35 new trucks this season. In this particular show they have inaugurated a system of schedules for all trucks on a regular run that goes far toward efficiency and safety in operation.

One very noteworthy point is that they are hauling over dirt and crushed rock roads, which means plenty of dust at the best, yet, when these trucks leave the line in the morning on schedule, the windshields are clean, cabs are clean, fenders and hood are also clean. You don't see any banged-up fenders or bumpers on the trucks—now this doesn't mean that they don't get occasional dents, or have some of the ordinary run mishaps, but it does mean that they are taken care of. This speaking of care of equipment may bring up the quetsion in your mind, "Just what does that have to do with the promotion of safety in trucking?" When you as an operator require that common sense principles be applied in the use of your equipment; when you plainly point out to your men involved that the equipment is valuable and that proper care of all equipment in their custody is demanded of them, you have made a great step in also applying a safety program from the standpoint that if they take care of their equipment accidents will be avoided. If we avoid the accident we certainly know there will be no injuries.

Under the heading of operation methods, the passing on either side of the truck while being loaded, the hoisting of workmen to and from the load, the dumping of loads without any safety factor being taken into consideration, all these, are occasional practices that you will see and are among the things to be guarded against. I might also add that in spotting trucks the top loader should be in position to see that all deck men and loaders are in the clear. In all loading operations whether from hot or cold decks, someone should be in recognized authority to direct and be held to that responsibility.

The dumping and unloading operations hold the most hazard, due to the fact that so many of such injuries are either fatal or of a serious nature. I want to emphasize that in either long or short haul operations regular and supervised methods should be used which will insure a maximum of safety.

Under personnel, the fourth point, too much importance cannot be stressed in selection of your key men. Under this selection of fitness, comes mental and physical, also general experience. These men do not under any necessity have to be supervisors and yet their choosing is just as important. For example, I have been told by many experienced truck drivers that they had thought they were good until they came to the handling of logging trucks. All the time they are in charge of hundreds of dollars in equipment and the safety of not only themselves but of anyone who might meet them, also the men who are working with them.

Loaders, hoistmen, hookers, are all key men and should be given the same careful examination for fitness. I believe that medical examinations to determine their physical fitness is not only a matter of protection to others but also to the applicant himself. I do not wish to be misunderstood or the thought given out that we should see men discriminated against, but rather through proper placement and guidance that men will give better service, enjoy better health and have a far greater chance to understand and guard against the hazards of their work than under the old way of hiring a man regardless of either physical fitness or experience for the work expected.

Cliff Hopkins Heads Annual Chest Drive

Cliff Hopkins, "Hop" to you, was general chairman of the Lewiston Community Chest drive this year. Opening the campaign on November 12, following the presidential election and Armistice day, Cliff remarked:

"It is good to remember that this is the only country left in the world where a fellow may contribute to some worthy cause just what he wants to contribute —and there is no gestapo agent behind him, telling what he must pay and what he must pay for."

With the budget of more than $14,000 the chest drive got off to a flying start, began to lag until Cliff "hopped" up his crews, and finally ended with the quota made. Incidentally, Cliff secured a lot of Page One publicity from the Lewiston Tribune, that in itself being quite an accomplishment.

First Aid Class Started

A class in first aid has been organized in Potlatch, with Roy Stark, American Red Cross first aid instructor, in charge.

The course consists of ten lessons of two hours each and covers treatment of wounds; dressings and bandages; treatment of shock; fractures; burns and scalds; sunstroke and exhaustion; poisons; common emergencies and transportation. The enrollment includes: Keith White, James Morgan, Joe Stone, Harold Olmstead, Paul Welo, C. L. McVicker, Vernon Young, Newell LaVoy, J. J. O'Connell, Charles Talbott, Jr., Arthur Sorweide, Herbert Huston, William Bell.

Kenneth LaVoy, secretary to Mr. Billings, has been busy with extra-curricular duties lately. He was given the job of organizing the Santa Claus parade in Lewiston for the Junior Chamber of Commerce.

ug Drivers Called ith Traffic Light t Potlatch Plant

With the old system of handling ggies there has always been difficulty the car loaders getting service when y needed it to move a load to the and the shed men have experienced like difficulty in moving out loads m the sheds to the cars or to the ning mill or other departments.

With the old system the men would e to get service by shouting to the drivers, which wasn't so bad on st One of the Main Dock, but the ders or shed men on East Three d West One would have to walk r to the main dock to signal, which k considerable time and was very nvenient. This has been corrected the installation of a system of col- d light signals for the carrier vers.

On the main dock, called East-1, re is a series of red lights which, en the switch is turned, blink. These nal the carrier driver that he is ted in a particular location. When answers the call he pulls a toggle itch which turns the light off.

To signal the carrier drivers from West Dock and the East Dock, e blinker lights are used.

The shed men turn the switch when y want service, which gives a green ht signal on the dock.

The replant, rebutt, moulding, and ling departments, as well as the three rfacers, all use the same system by naling with red lights.

Stickers Colored Too

Along with other obsolete practices the Potlatch unit, the use of white kers on the loads with instructions to the destination of the stock has en relegated to the scrap heap.

This system was fairly satisfactory the days when the bug driver could close enough to read the instruc- ns on the sticker. With the installa- n of the new Hyster carriers, it was possible for the operator to read that r.

The new system embodies the use colored stickers which tell the carrier erator the disposition of the load.

Red indicates "to the moulders and ting saw"; green "to the sheds"; or- ge, "to planer—re-run"; yellow, "to butt"; blue, "to novelty rip saw"; nk, "to retail dock."

If it is a white sticker, that sticker ll carry the order number, and in- dicates movement to the car. Purple is to call attention to some special treatment of the particular load and requests preference in movement. It is applied in addition to the various other colored stickers.

Notes From the Clearwater Woods

Camp N

Camp N's time is drawing to a close. The skidding has narrowed down to the remainder of four big strips and there isn't a great deal left to saw. It is a race to finish before the weather gets to bad. Worst of all, the cars have all gone out and a grindstone occupies the space reserved for parking. That lowers the prestige of the camp. Since the roads have gotten too bad for automobiles to travel out over Elk mountain, the men week-ending in town are obliged to catch the truck to Camp 14 and the speeder from there to Headquarters. At night, back-end riding on the speeder and in trucks takes on the aspects of a Byrd expedition in the Ant-Arctic, but by the time the next Friday rolls around the boys are ready to go again, in spite of what they had said on the previous Monday about staying in until camp is closed.

Camp 14

Freezing weather and light snows have aided logging at Camp 14. Four degrees above zero is the coldest registered here as yet.

Another hunting season has come and gone. Among those who got their elk are Jim Wilson, "Boots" Edelblute, Oscar Olson, Thor Byberg, Malcolm Olesen and Norman Clark.

Frank Stedman, formerly timekeeper at Camp N, has been on time studies at Camp 14 recently.

Camp 14's skidding and loading totaled 13,904,194 feet at the time of writing.

A water tank for serving engines and loaders is under construction at Camp 14. Ole Vinsand is the builder.

Camp 22A

Operations at this camp are now coming to a close. The sawing is finished and there is only about 1,000,000 feet of logs yet to be skidded.

After battling seas of mud for several weeks, the weather finally turned favorable and all roads have been in good condition, with "cats" skidding about 100,000 feet a day. One slide loader is loading about 12 cars a day.

Fred Thomas gave everyone in camp his usually fine Thanksgiving dinner.

As soon as the skidding is finished, the camp will be moved over to the Camp 24 site, the new location on Alder creek.

Camp 24

This camp is rapidly being changed from a railroad construction show to a logging set-up.

Twelve gangs of saws started November 19 and skidding was scheduled to begin within a few days. There will be no horses at Camp 24, as all skidding will be done by "cats."

Phil Peterson and his crew are finished building railroad and are now filling bridges No. 1 and No. 3 on the Beaver creek line.

Camp 27

Skidding roads at Camp 27 have been in good shape since freezing weather set in, and 10 "cats" have been skidding anywhere from 150,000 to 190,000 feet per day. The 200,000 feet mark was reached once also.

The number of teams has been cut down to six, so the "cats" are doing the yarding to a great extent.

Loaders are putting on about 170,000 feet a day.

There are 110 men in Camp 27 now.

Camp 23

Now that the muddy conditions caused by the weather are over, for a while, skidding has picked up a little. At the time of writing, team skidding had netted about 2,700,000 feet.

In a few days some of the teams were to be replaced by "cats" since the hauls are beginning to lengthen out.

Pete Carr & Co. are going full steam and have 5,125,000 feet cut to their credit for the season.

There are about 150 men in camp at this time with Maury Thompson as camp foreman and Steve Couligan as assistant.

Rainbo-logs to New York

Just as this issue of *The Family Tree* was going to press, Roy Huffman announced that a carload of Rainbo-logs had been ordered by Barnes Co., of New York City. The car was to have been loaded out and shipped by December 5.

This takes New York off the list as a "six-log carton" only market and marks that sphere as a Rainbo-log center in a big way, he said.

Growing Market For Rainbo-logs Takes Company's Products Into Nineteen States; Here's New List of Places Where They're Sold

A growing market for Rainbo-logs, the logs that give the colored flame, now takes this product of Potlatch Forests, Inc., into 19 states of the union, Roy Huffman reports in this isue of The Family Tree. To the list of states and their various dealers published a year ago has been added Iowa, Missouri, Kansas and Oklahoma. Following a custom of seceral years' standing, the company again presents a list of firms handling Rainbo-logs from which you may pick your nearest dealer during the holiday season:

(The retail prices of Rainbo-logs in different points varies due to transportation and distribution costs. As a general thing deliveries can be made to points within a radius of 50 to 100 miles of any dealer named here at not to exceed fifty cents per hundredweight over that dealer's retail price. In minimum freight shipments of 100 pounds, this would amount to seventeen cents per box. By parcel post, one box may be shipped in the first and second zones, up to 150 miles, for forty-six cents.)

CALIFORNIA

Oakland—
- Capwell, Sullivan & Furth
- H. C. Capwell
- Maxwell Hardware Stores
- Many Other Groceries and Fuel Dealers

Santa Barbara—
- Ott Hardware Company

Berkeley—
- Shattuck & Kitteridge
- Hinks Department Store

San Francisco—
- Hale Bros. Department Store
- The White House
- Many Groceries and Fuel Dealers

Los Angeles—
- Pres-to-logs Sales, 753 No. LaCienega Blvd.
- May Company
- Broadway Department Store
- Bullocks
- Fitzsimmons Stores
- Certified Grocers Stores
- Spartan Stores

Pasadena—
- Peddycord & Son

Santa Monica—
- Harts Feed & Fuel Store
- Pendleton Feed Store

San Diego—
- Fred C. Silverthorn & Sons, Inc.

COLORADO

Denver—
- Any Powerine Company Station
- Colorado-Utah Coal Co.

IDAHO

Boise—
- Boise Payette Lumber Company

Lewiston—
- Potlatch Forests, Inc.

Potlatch—
- Potlatch Forests, Inc.

Coeur d'Alene—
- Potlatch Forests, Inc.
- Nearly Any Fuel Dealer in Northern Idaho

ILLINOIS

Winnetka—
- Winnetka Coal & Lumber Company

Wilmette—
- Hoffman Bros.

Chicago—
- Wm. H. Hoops & Company, 531 So. Wabash Avenue
- Von Lengerke & Antoine, S. 33 Wabash Avenue
- The Fair Store
- Pres-to-logs Sales, 6101 N. Keystone Ave.

South Holland—
- Wausau Lumber & Coal Company

Aurora—
- Ward Lumber Co.

Rockford—
- Crumb Colton Co.
- Rockford Lumber & Fuel Co.

Peoria—
- Peoria Lumber Co.

Champaign—
- Thompson Lumber Co.

IOWA

Cedar Falls—
- Townsend & Merrill Co.

Waterloo—
- Walker Lumber Co.

Sioux City—
- E. S. Gaynor

INDIANA

South Bend—
- South Bend Lumber Company
- Indiana Lbr. Mfg. Co.

KANSAS

Topeka—
- McCleery Dudley Co.
- Whelan Lumber Co.

MICHIGAN

Detroit—
- J. F. Weber & Sons, 970 Gratiot Ave.
- J. L. Hudson Company
- The Earnst Kern Company
- The Detroit Mantle & Tile Company

Grand Rapids—
- Paul Stecketee & Sons

MINNESOTA

Minneapolis—
- The Dayton Company

St. Paul—
- Acme Sawdust & Shavings Co.
- The Emporium
- The Golden Rule
- St. Paul Glass Company
- William Coal Company
- Bland Fuel Company

Cloquet—
- Northwest Builders Supply Co.

Fergus Falls—
- Fergus Falls Lumber & Fuel Co.

St. Cloud—
- Mathew Hall

MISSOURI

St. Joseph—
- South Park Lumber Co.

MONTANA

Missoula—
- Interstate Lumber Company
- Blair Transfer Company

Great Falls—
- John Leslie Paper Company

Butte—
- Interstate Lumber Company

Anaconda—
- Interstate Lumber Company

Deer Lodge—
- Interstate Lumber Company

NEW YORK

New York City—
- B. Altman & Company, Dept. No. 29
- Bloomingdale Bros., Dept. 671-G
- Lewis & Conger
- R. H. Macy & Company, Dept. 160
- Stern Bros.

Brooklyn—
- The Barnes Co., 173 West St.
- Abraham & Strauss, Inc., Dept. 674
- Frederick Loeser & Company

NORTH DAKOTA

Fargo—
- Oscar H. Kjorlie Co.

NEW JERSEY
(6-Log Cartons)

Newark—
- L. Bamberger & Company, Dept. 160
- Kresge Department Store

OKLAHOMA

Oklahoma City—
- Warr Lumber Co.

OREGON

Portland—
- Meier & Frank Department Store
- Meisen Fuel Co., 3110 N. W. Front Ave.
- Apex Fuel Co., 1542 N. E. 33rd

SOUTH DAKOTA

Aberdeen—
- Thompson Yards, Inc.

Sioux Falls—
- Ward Lumber Co.

UTAH

Salt Lake City—
- Any Fuel Dealer

Provo—
- Any Fuel Dealer

Roosevelt—
- Leslie Ashton & Sons

Logan—
- Wansgaard Coal & Pipe Company

Sugarhouse—
- Sugarhouse Coal Company

WASHINGTON

Seattle—
- Ajax Fuel Company, 7402 Roosevelt Way
- Holmes Coal Company, 324 No. 85th Street
- Napier & Scott, 1927 4th Street
- Scandia Fuel Company, 2342 25th St.

Everett—
- Weyerhaeuser Timber Company

Longview—
- Weyerhaeuser Timber Company

Spokane—
- The Crescent
- The Palace
- Jensen Byrd Company
- Myer S. Rubens, 1009 1st Avenue
- Any Safeway, U. R. & M., or Stone's Store
- Any Fuel Dealer

WISCONSIN

Milwaukee—
- John Schroeder Lumber & Supply Co.

West Bend—
- Home Lumber Co.

Walworth—
- Walworth Lumber Co.

Waukesha—
- Palmetier & Abell Lumber Co.

Kenosha—
- Kenosha Lumber & Coal Co.