

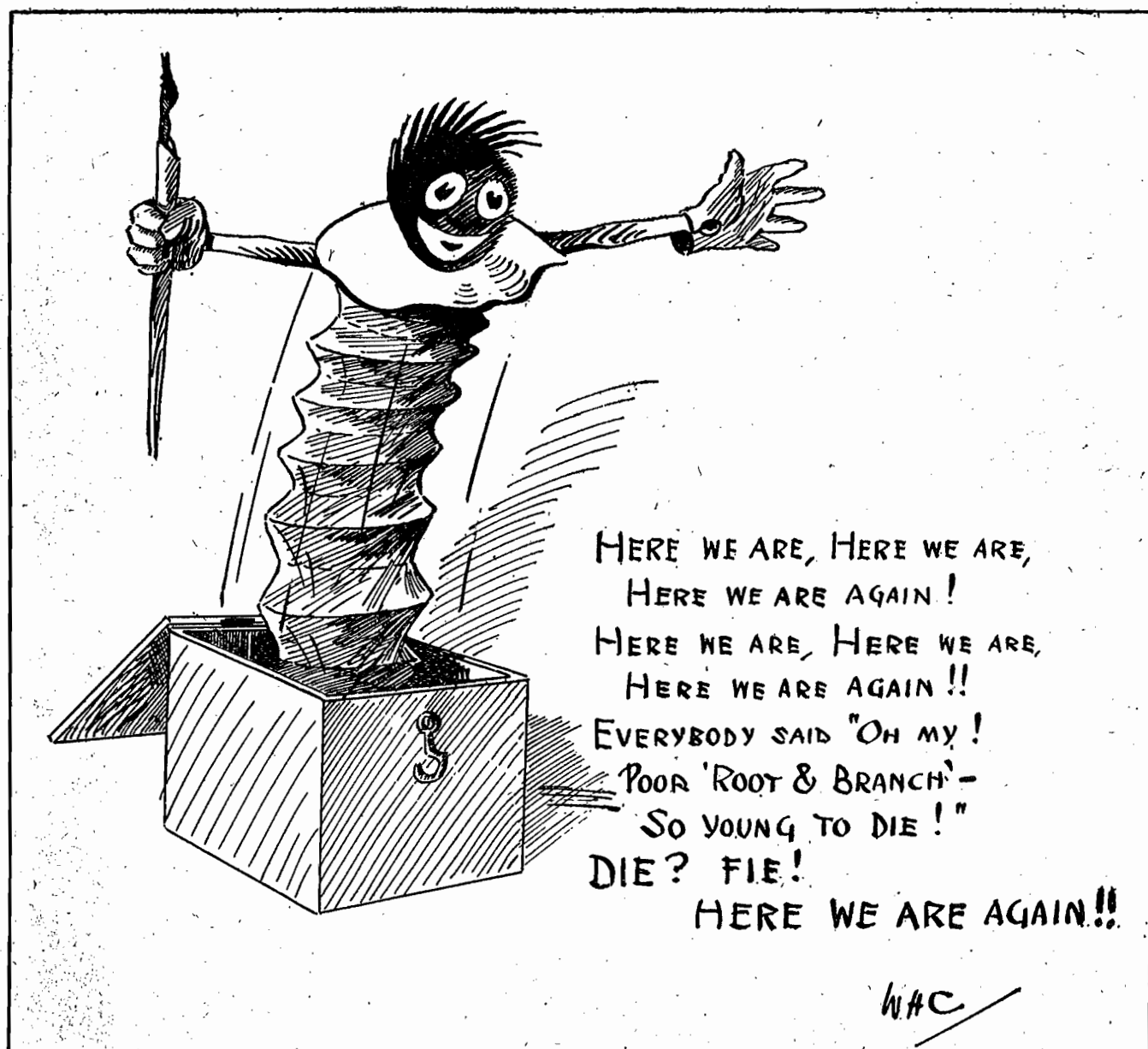
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BRITISH COLONIAL  
LANDS DEPARTMENT  
FOR FOREST SERVICE

# ROOT AND BRANCH

Vol. III.

JANUARY, 1925

No. 1.



This magazine is a staff publication, and is not in any sense a medium for the expression of Governmental policy.

The object of its publication is to promote discussion, foster exchange of ideas, disseminate news of "family" interest and, through the encouragement of individual initiative, to strengthen the spirit of co-operative effort.

## CRANKING UP

P. Z. Caverhill.

The old year is now a matter of a record. The time is here for toting up, striking a balance and closing the book. Many things have been accomplished - in some we have failed. "Root and Branch" seems to have fallen in the latter category and I believe that many of you will agree with me that it is not the journal, but we who have failed in our support of it and that through this failure we have suffered a loss in personal contact, a loss in the enjoyment of our common work and a loss in organized efficiency.

With the New Year "Root and Branch" again greets you full of hope and promise. With your co-operation you can make that promise something more than a mere New Year salve to conscience.

In policy we have somewhat changed. An Editorial Committee will assist our Editor in arrangements for an editing the material received for publication. This will, we hope, relieve Mr. Currie of some of the load formerly carried by him alone - a load which, I believe, was only appreciated by the meter in its record of watts as it ticked off the burning of midnight juice. The Committee will also be charged with securing contributions from the field which are badly needed if this paper is to fulfill its ultimate function.

Under the new policy the editorial committee will be assigning you special subjects on which to prepare an article. These subjects will tend towards lines of work for which you have shown special aptitude or have special knowledge. This does not, however, preclude a continuation of your daily anecdotes of work, short cuts to accomplishments, or difficulties to overcome which you would like to discuss. Let me emphasize again that 'Root and Branch' should be your medium for all of these.

And now, on behalf of the Branch, I am going to wish you all Prosperity and Happiness for the New Year.

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## RANGER GRITTEN GIVES US SOME HISTORY

In his annual report of 1923 Ranger Gritten, then of the Swanson Bay District, late of the whole coast North of Bella Bella and now of Prince Rupert, gives us some interesting bits of history connected with the operations in that part of the country. It will be seen from this that developments on the Northern Coast are quite recent and that the early days were full of uncertainty and troubles just as they are now.

Logging near Swanson Bay probably commenced about 1895, when a small amount of handlogging was done for Cunningham's Mill at Port Essington, though it is doubtful whether much of the supply for this mill was logged so far South.

In 1901 a boom was taken from Warke Island. \$3.50 per M. was paid to the logger, the mill doing the towing. Handlogging licences cost \$5.00 at this time, and were not bounded. Hand-loggers working near Swanson Bay supplied the Georgetown mill with logs about this time.

Between 1901 and 1907 two or three mills at Prince Rupert bought handlogged timber from the Swanson Bay locality, and quite a lot from the Kitimat Indians, but it is not probable that the total volume of handlogging done near Swanson Bay was very great up to 1905.

Prices were gradually increasing, and the sturdy 'old-timers' were developing their now hoary traditions. Subsequent increased logging activity, after 1907, was due to the erection of pulp mills, the Ocean Falls plant being commenced in 1907, and the Swanson Bay plant in 1909.

In the fall of 1905 a portable mill of 15 M. daily capacity was erected at Swanson Bay. The lumber produced was used to build a larger mill. This was built in 1906, and the lumber produced from it built the pulp mill. The sawmill capacity was then 80 M. per day, and it was 1909 before the first pulp was produced.

During the period 1906 to 1909 many millions of feet of lumber, (Cedar and Spruce) and a large quantity of box shooks were shipped and sent on scows to Prince Rupert, Vancouver, and to Stewart. A fine wharf was built at Swanson Bay in 1906 to facilitate these shipments. The output with the exception of 3,000 M. donkey logged near Sarah Island, Griffin Pass, and Laredo Inlet, was from handlogging operations (now \$10. and still not bounded). Log prices ran around \$6., \$7. and \$8.

In 1910, after producing about 1,000 tons of pulp, under conditions of rather intermittent operation, U.S. capital provided certain improvements, and for a year 20 tons of pulp

and 40 M. lumber was produced daily. This production was evidently not wholly profitable because in 1911 the mill was "down", and until 1916 the only production was shipment of stock on hand, and the cutting of log stocks by the caretakers, said to be agents of Evans, Coleman and Evans.

A period of depression existed for the handloggers during 1913 to 1916, both pulp mills (Swanson Bay and Ocean Falls) were "down".

In the Swanson Bay district during the 1911 to 1916 shutdown, a very small amount of handlogging was done for the Prince Rupert mills, and two booms were taken out of the Lakes near Surf Inlet for the Namu Cannery, for box making, in 1915.

The general level of prices for logs increased steadily and by 1913 had reached an average of \$9. During the booms occurring between 1916 and 1920 prices were several dollars higher, \$15. being a common figure in 1920.

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#### WOMEN'S HOME COMPANION

#### Shortest Short-story Contest Winners

October 1924.

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|         |   |                        |
|---------|---|------------------------|
| Sunrise | - | Majestic virgin forest |
| Mid-day | - | Receding voices        |
| Sunset  | - | Blackened waste.       |

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## "UNDER THE GREENWOOD TREE"

C. R. Lee.

In one of our periodical attempts to get the "Forest Act" under our hat, we naturally turned to part XI as being in season, and under Section 92, Sub-section 1, we found:- "Except as provided in sub-sections 2 and 4, no person shall set out, start, or kindle any fire during the close season in or within one-half mile from any forest or woodland or any slash or forest debris.

(2) Subject to the observance of all obligations and precautions imposed by this Act or the regulations, a person may set out, start, or kindle a fire for:- ( )

- (a) Cooking or preparing food:
- (b) Obtaining necessary warmth for any person:
- (c) Clearing land.
- (d) Burning slash, brush, grass, or other inflammable material:
- (e) Any necessary industrial purpose permitted by the Minister.

(3) No person shall set out, start, or kindle any fire for clearing land, or for burning slash, brush, grass, or other inflammable material, or for any industrial purpose without first obtaining from the Forest Branch a written permit therefor."

Everything was plain sailing until we came to Sub-section 3, which looked as if the man who needed fire in his business, so to speak, was under a certain amount of restraint, but the party who, on pleasure bent, needed a fire to cook food, or warm himself, was apparently under no such restraint, and the discrimination, if one might call it such, seemed quite apparent.

We could not help asking ourselves, "Why was this distinction made?"

Having caught ourselves in a somewhat enquiring turn of mind, we forgot our original purpose, and left the F.A. to try and find an answer to our own question, and to find out if this apparent distinction was justified.

Now the seeker after knowledge, or rather information, must not balk if he finds it wrapped up in statistical style, so we turned to the Report of the Forest Branch for 1922, which happened to be quite handy, and under the heading of "Forest Protection", page 142, and 143, we came across our quarry. On page 143 we read:- "Between 80 and 90% of the fires originate from human causes, mostly due to carelessness, or the procrastination of taking precautionary measures until too late. Eliminate these fires and much of the problem is solved. The work conducted by the Forest Branch with this end in view, is along the line of educational publicity..... The benefit of this sort of educational work is difficult to measure, but there is little doubt that it did much good."

We thought this was pretty good, and then plunged right into the tabulated dope for further corroboration, but what did we find? Over 24% of all fires in 1922 were caused by "Campers and Travellers".

"Tut, tut", you say, "Anybody knows 1922 was a very exceptional year for fires".

Yes, that fact struck us too, so we turned then to another table giving us official figures for nine years back, including 1922, and we felt that the exceptional years would show up, but again we were disappointed.

From 1914 to 1922 Campers and Travellers have been responsible for 24.43% of all fires during that time. (Our figures, of course, refer only to British Columbia). They excelled themselves in 1916 when they accounted for 31.02%, and they must have been disappointed with themselves in 1918 when they caused only 17.36%.

In 1922 when the appeals to the Public reached the peak, so to speak, with the Canadian Forestry Association car exhibit, the Nomadic part of our population rolled up a percentage of 24.16% of all fires in that year, just 17 under their annual average for 9 years.

We regret we are unable to quote the data for 1923 as applied to the whole Province. However we are glad to be able to include the figures for the Vancouver District, and out of a total of 503 fires last year, Campers and Travellers were responsible for 90 or 17.89%, costing the Forest Branch to extinguish \$4549.84, or 22.51% of the total amount spent by the Forest Branch in controlling fires in that year, and for every dollar spent in control the damage caused was worth 4 - the damage amounting to \$19506.00, being 4.98% of the total damage due to fires in the same year in the Vancouver District.

These, therefore, are the figures. Many of you who read have helped to compile them, so you, at least, will not doubt their accuracy. At any rate they are official, and provide us a solid foundation on which to build up our case against the Camper and Traveller. But more should really be laid against them than appears. The average number of fires which occur every year from unknown causes, is in excess of 226. In face of the above, it is only reasonable to assume that Campers and Travellers are responsible for their usual percentage of these fires also, which would seem that, conservatively, 45 fires per year during the last 10 years, should be charged to Campers and Travellers also. The Chief Forester is authority for the statement that in 1923 the average cost of each fire to the Forest Branch was \$47.50, so that \$2137.50 should be tacked on to the cost of fires from this source in the Vancouver District for last year.

Nor is this all. Fires caused by Campers and Travellers are generally meant to refer to fires caused by their camp fires. There is yet another angle from which to view their depredations, and we refer to fire caused by smokers - the result of a carelessly discarded match, or the negligent tossing of the cigar or cigarette butt into inflammable material.

We are fortunate in being in a position to present to the reader official figures on loss from this cause in the Vancouver District alone, last year being the first year official record has been kept on loss from this source. The year 1923 has "Smokers" debited with 86 fires, just 17% of the total for last season, costing the Branch \$7558.85 to extinguish-only 37.4% of last season's cost!-and with a damage value of \$12648.00, or 3.2% of total damage from all causes.

Logging operators and their employees have been glad to enroll themselves alongside the Forest Branch in the prevention of fire, and it is the rule, among the better regulated camps, that employees shall not smoke in the woods, and "Tailor-made" cigarettes are usually unobtainable at the camp store during the fire-season. Smoking is permissible around camp, but employees find it to their own advantage to leave the weed in the bunkhouse. Admitted there are exceptions, this practice is now general.

This narrows smokers down, pretty much, to our bete-noire, campers and travellers, and we feel safe in saying that these are responsible for 50% to 75% of the bush fires attributed to smokers.

The man who seeks solace from city strife under the greenwood tree, is, too often, undisciplined in the bush, and is generally blissfully unconscious of his fire-bug potentialities, and, lacking any kind of restraint, too often he is indifferent also. He looks upon the tall timber as one place where he can, at least, have freedom, but fails to realise "this freedom" may mean, for others, comparative servitude, and too often he neglects to bear in mind that his worst enemy in the forest is fire!

During our limited experience in the Forest Branch, we have noticed that Rangers, in determining the causes of fires which have come under their jurisdiction, have been very conservative in attaching blame. Where the cause has not been definitely definite, and of which they have no absolute proof, the classification is always "unknown". Many of these fires have undoubtedly been caused by campers etc., but where a doubt has existed campers have been given the benefit, and so the classification becomes, "Unknown". This is as it should be, and we believe other districts are equally fair, so that the figures given above need no apology. They are fair, and are the minimum which should be charged against the simple lifers.

We feel sorry we cannot present the money cost, and values of damage done during the years under review, and so launch

our indictment in the form of a sum-total calculated to make the reader gasp and then stun him! We will have to forego that distressing effect, but we have got to the point where we can ask the reader "Are you ready for the question?", and the question is "What are you going to do about it?"

If the reader thinks it is too hot to be bothered with questions let us suggest one answer, "Stop the leak in the Forest Act" - which brings us back to where we started from.

Why not remove the privilege of the Campers and Traveller, and make all men equal in the fire-season-so far as the use of fire is concerned by making it necessary for everybody to obtain a permit to use fire within  $\frac{1}{2}$  a mile of any forest land etc., irrespective of the purpose for which that fire is needed? Timber afire amounts to the same thing in the end, no matter how the fire started, so why not make an effort to cut out loss from this source by getting at the root of the cause? Would the field-men like to go back to the days of the unrestricted use of fire by settlers? Perish the thought! If permits were necessary for campers, which could be obtainable free of cost from the Forest Branch, before going into the bush, and from all Patrolmen, Asst.-Rangers, Rangers, etc., setting out the name, address, business etc. of permittee, the locality such holder intends camping in, date he intends to return to town, and setting out plainly his liability for all fires caused by his campfire, or his smoking, would the field-man prefer to go back to the old go-as-you-please style which obtains today? We doubt it.

In our humble opinion permits would stop this leak very effectively. Permits would cause a drop in fires from campers of at least 50% resulting in less cost to fight, and less damage, all for no extra cost to Forest Branch, with exception of the permit books themselves. Much of the cost would be recoverable from those who caused the fires, because the field officer would be able to place his finger on the right man in the majority of cases. When a permit system brings home to the camper his personal liability, as no amount of posters will do, then fires will certainly decrease from this cause.

A permit system would help out the Forest Branch campsites. Parties using the campsites would be exempt from permits, and many would thus use the campsites who would otherwise pass them up.

Objection will be raised that the Branch cannot go faster than public opinion will allow, which is true, and good advice. But a steady perusal of the daily papers, which is the easiest attainable source of public opinion, distinctly shows that the public, generally, is fully alive to the loss caused by fire, and we wish we had space to quote many letters, news items, and editorials, in support of this. To state that public opinion is not prepared for this step is to deny that advertising, lectures to school children and public bodies, essay competitions, etc., etc., have been of any use whatever. Public spirited citizens

would be the last to decry this method of stopping a leak to our outstanding natural resource, and most of them would find it a novelty to obtain a "permit" which did not cost anything!

The idea of permits for campers is not new, we claim no originalty. It has been talked of "Back East", but, so far as we are aware, nothing more concrete has developed. It remains for British Columbia, "a Province with a reputation for advanced legislation to sustain" (vide the recent speeches of the lady aspirants), to lead the way, and once the course is embarked upon we shall be surprised the system has not been inaugurated before.

It is correst that a recent amendment to the Forest Act sets out that campers shall clear away debris from their camp fires for a space of three feet, and shall totally extinguish their fires before leaving, which is good, but it does not go far enough. It leaves the Branch ignorant of the party starting the fire, and leaves the apprehension of the offender to chance.

A permit system would remove this drawback, and strengthen the hands of the field-men wonderfully, without adding appreciably to their work, in fact in our opinion it would decrease work by decreasing fires.

From another point of view, is the Act quite fair to the operator who equips himself all along the line, down to the last bucket, and takes all precautions, and yet lets a camper wander through his limits, setting his camp-fire wherever his fancy pleases him, with little or no thought for the probable consequences?

On page 15 of the 1922 report we read "That the seriousness of the forest fire situation is justification for the most drastic action for control". As the conservation of the forest is the corner-stone of our existence as a Branch, let us, then, take bold measures if such are indicated. If stopping this leak would appear to demand a passport to the timber, let us not be too sentimental about the matter. The magnificent stand of timber with which Nature has endowed this Province will never be duplicated. Let us have the stable door on the hasp, at the latest by 1925, for although we may manage to retain the horse we ought not to let anybody get away with the harness either!

The above, however, are the facts. All they need is a hearing and they will speak for themselves.

Here's to "Campers Permits in 1925"!

PREVENT FOREST FIRES IT PAYS!

## "PLAYING 'POSSUM" !

"Many things have been accomplished - in some we have failed. "Root and Branch" seems to have fallen in the latter category and I believe that many of you will agree with me that it is not the journal, but we who have failed in our support of it and that through this failure we have suffered a loss in personal contact, a loss in the enjoyment of our common work and a loss in organized efficiency."

There we feel the Chief Forester has hit the nail squarely on the head. "ROOT AND BRANCH" was not in itself a failure - decidedly not!; where we fell down was in placing too much reliance upon spontaneous effort.

Clearly, spontaneous effort is not to be depended upon, and we have decided upon a programme of definite assignments. That is to say, we propose to assign to the field men, each in turn, definite subjects upon which to write. In this way we hope to be able to produce "ROOT AND BRANCH" regularly month by month. It may not reach you always on the same day - it must be remembered that our facilities for production are limited, and that the demands upon them are heavy and continuous - but so long as we are supplied with the material, your copy will reach you once a month. In other words, there is nothing mechanically wrong with the old bus, and she will run so long as she gets the gas. It's up to you to supply the gas.

During the past few months we have been bombarded with enquiries as to why "ROOT AND BRANCH" did not continue to come to hand, and some of them from the most unexpected quarters. All this, of course, was extremely gratifying, as being evidence of the fact that the magazine really was appreciated. It is an unfortunate trait of human nature (we do not claim discovery) that appreciation is so often withheld during the lifetime of its object, only to be displayed with lavish profusion after his death.

This may explain the silence of the past few months. Mind you, we do not say it does - we say it may. It may be that we have been shamming dead for the pleasure of reading the kind things said about us in our obituary notices.

However, here we are again, not only alive but positively in rude health. Already, in response to our programme of definite assignments, we have in hand a sheave of articles from the field, all of which we hope to publish in our next issue, which will follow this one just as rapidly as our facilities will permit, but in any case within one month.

We are convinced that the "Definite Assignment" is the only feasible plan for a magazine of this sort, and we hope by its means soon to re-establish ourselves in the good graces of our many friends - and they are more numerous than we knew! - and to produce a magazine which will be properly representative of the Service as a whole.

THE EDITOR.

## NOTES ON "OPERATION" IN SOME U.S.F.S. AREAS.

The following are impressions of a brief visit paid to the Colville and Chelan National Forests in Washington, which border on the Vernon Forest District. Two days were spent going over office methods, etc., and one day was spent in the field, on each of the above Forests.

The natural conditions, topography, climate, forest types, settlement, etc., of the areas visited are identical with those of the Southern part of the Vernon Forest District. Observation of the methods of the U.S.F.S. in meeting the problems presented, was therefore especially interesting to me.

One difficulty we do not have, arises from the fact that the National Forests have large areas of forest land, farm or waste land adjoining their boundaries, which are entirely outside their jurisdiction. Co-operation with State officials on these lands does not appear to be as close as is desirable, and in addition the State does not appear to spend as much money in administering these lands, or in prevention or suppression of fire, as the Federal Service. We are fortunate in having only one Service over the greater part of this Province, so that any fire burning is our fire.

### Fire Protection Plan.

I found a "Fire Protection Plan" for each Forest made up by Ranger Districts. It begins with a few general clauses, a general description of timber types, natural conditions, etc. Then goes into more detailed description of special hazards, such as slash areas, areas of wind thrown timber, a steam railway with bad grades, etc., areas and special seasons of the year that fire hazards may be expected, and suggestions for meeting them. Making such a plan would necessitate considerable thinking out by Ranger and other Forest officers, of the conditions in the particular Ranger District, and would probably crystalize and make definite a great deal of hazy knowledge. It would also be very useful to a Ranger in taking over a new district.

### Fire History.

A large ledger has been kept for each Forest, giving the earliest and latest dates of fire occurrence over a period of years, and occurrence by ten day periods, also classifying fires by causes, and by size-(under 1/4 acre, 1/4 to 10 acres, over 10 acres). Fires were mapped in this ledger using symbols, this did not give a clear impression and the system has now been changed - fires are plotted to scale using a different color for

the fires of each year, as is done in this District, on a 'fire map'. The ledger was kept up for five years, but has been discontinued. The information is however, valuable, and is available in the Supervisor's office. The 'fire map' is still being kept up.

#### Improvements.

A definite policy of opening up the Forests is being carried out and an Allotment is available at the beginning of each Fiscal Year for construction of roads, trails, telephone lines, lookouts, etc. Roads through the Forest, costing over \$5000.00 per mile are built by Public Works, all other improvements are done by Ranger labor assisted by a semi-permanent personnel. This work is done during the Summer, taking advantage of the good weather, which means more efficient work than that done in the Spring and Fall, also road and trail crews, etc. are composed of men with fire-fighting experience. These crews are kept in constant telephone communication, and men can be drawn from them at any time to handle fires.

#### Lookout System.

The Colville Forest (807,000 acres) has six Primary Lookout Stations and six Secondary, all connected by Forest Service telephone with the Supervisor's office. This requires over 300 miles of line. The ground under direct observation from each Lookout Station has been plotted, and practically no 'dead ground' exists on the Forest. A Platting Agent or Dispatcher in the Supervisor's office records all smokes reported and institutes the necessary action. Two or more bearings on the smoke can usually be obtained, and the nearest Forest Officer is detailed for the job. Small fires are often handled by the man from the nearest Secondary Lookout Station - called a lookout-chaser. The principle has been laid down by Mr. Greeley, the Forester, that the fire detection system shall be on the hills, and patrol in the valleys reduced as much as possible.

The field personnel of this Forest in 1924 consisted of 12 Lookout men, 5 Rangers, 5 Protective Assistants (or Assistant Rangers) 2 Patrolmen with cars and 4 Patrolmen with horses, 1 packer used to pack supplies to the Lookouts, and on improvement work, and 33 road, trail and telephone men. There was in addition a supervisory staff of 1 Supervisor, 1 Road Superintendent, 1 Lumberman, 1 Junior Forester, 1 Platting Agent (ranks as a Ranger) and 2 Stenographers, making a total personnel at the peak of the fire-season, of 69.

### Fire Reports.

No Preliminary Fire Report is used, - with our larger areas and less intensive system I consider this report indispensable. The Individual Fire Report, - a copy enclosed herewith, does not appear to contain any essential that is not found in our Final Fire Report. It is ... noticeable that less stress is laid on mapping, - the map space is two inches square, the History of the fire, or Suggestions.

### Fire Permits.

Burning can apparently be done at will in the State of Washington throughout the year except in the case of "forest debris", when a Fire Permit is necessary during the close season. A settler can therefore burn grass, weeds, etc., without regulation during the hot weather. This complicates matters for the Lookout System, also makes control of burning very loose, many fires started, to burn other material, escaping and burning "forest debris". U.S.F.S. officers have authority under State laws to issue Fire Permits for burning "forest debris". State Fire Wardens apparently have authority to call out men to fight fire, but this power is not delegated to officers of the Federal Service. Camp Fire Permits are required during the close season for campers on National Forest lands. Copies of both Permit Forms are attached.

### Maps and Folders.

The Forest Service policy is to promote the fullest possible use of National Forests by the public. Maps for each Forest are issued free, showing roads, trails, etc., and information regarding fishing, hunting, camping-places, etc., is printed on the back of the map, forming an attractive folder - see map of Colville National Forest attached. The Forest Service also issues a 'Road and Recreation Map' of the State for public distribution, showing roads, location of National Forests, and points of interest - see map enclosed. This policy will take more fire into the Forest, but will certainly tend to build up public interest in and support for the Forest Policy. Forest Service wooden road-signs on secondary roads and trails are a useful public service, and carry fire warning.

### Public Camp-Sites.

I saw several spots designated as camp sites, but no improvements had yet been made on them.

## Posters.

Fewer signs per mile but good design, fewer words and big type - to be read at a glance, - and striking colors, red, yellow and black, - as usual the red and yellow appear to fade out badly on exposure.

## Emergency Ration.

A 3 day (9 man meals) emergency ration is in use in the U.S.F.S., put up in a sealed corrugated cardboard box,  $9\frac{1}{2}$ " x  $6\frac{1}{2}$ " x 12", net weight 10 lbs. This contains the following:

| <u>Item</u>   | <u>Unit</u>     | <u>Net Wt.</u> |
|---------------|-----------------|----------------|
| Bacon         | : 2 cans        | : 18 oz.       |
| Corned Beef   | : 1 can         | : 12 "         |
| Baked Beans   | : 3 cans        | : 24 "         |
| Cheese        | : 1 can         | : 4 "          |
| Sw. chocolate | : 2 bars        | : 16 "         |
| Hardtack      | : 4 8-oz boxes  | : 32 "         |
| Rice          | : 1 can         | : 16 "         |
| Rolled oats   | : 1 "           | : 8 "          |
| Sugar         | : 1 "           | : 8 "          |
| Coffee        | : 1 " pre'd.    | : 2 "          |
| Milk          | : 3 cans, 6 oz. | : 18 "         |
| Salt          | : 1 can         | : 2 "          |
| Candle        | : 1             | : --           |
| Matches       | : 1 box         | : --           |

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10 lbs.

This ration is very useful in making a quick get-away to a fire. Sugar, salt, oatmeal, etc., are put up in separate tins, - possibly a re-fillable pack could be devised to reduce cost. I was unable to discover the cost of the pack now in use.

## Elapsed Time.

This is the time elapsing from the first notification of a fire till a Forest Officer is on his way. Great stress is laid on this point, and the following table of maximums is published:

|                                  |             |
|----------------------------------|-------------|
| One man in car - - - - -         | 10 minutes. |
| One man with horse - - - - -     | 15 "        |
| One man with saddle & pack horse | 30 "        |

Stress is also placed on hitting the fire at "4 A.M." - daybreak.

### Rates of Pay.

Wages for fire-fighters appear to be set by each Supervisor for his own Forest, without any co-ordination. This resulted in different rates being paid in the two Forests visited, although they were adjoining and conditions were apparently the same.

### Method of Pay.

There being no local fiscal agent, all fire cheques are paid through the Portland office, with an average delay of more than one week. I was advised that very few non-residents were employed and therefore there was very little trouble caused by this delay.

### Humidity Records.

I found that Rangers were equipped with the same instruments for recording relative humidity and temperature that ours carry, and that Supervisors' offices were equipped with Hydro-Thermographs of the same type as in this Service. This is the first season for making these records, and from my observation of methods of using the instruments, the records for this year will not be very reliable.

### Honorary Fire Wardens.

I found no system such as our Honorary Fire Wardens and Fire Prevention Officers. This was discussed, and members of the U.S.F.S. appeared to be very keen to have one started.

### Co-operation in reporting fires.

About 6 Lookout Stations on National Forests overlook parts of the Vernon and Nelson Forest Districts. As these stations are not supplied with maps of our lands on a scale corresponding to their fire map (1" = 2 miles) they have been unable to report location of fires observed in our territory. I arranged that they should report by telephone or telegraph - at our expense giving true bearing on the smoke and point where this line crosses the International Boundary, e.g. "Half acre fire, North forty-five West, <sup>shown</sup> sixty chains West of Monument seventy-nine". As these Monuments <sup>shown</sup> on both the American maps and our own, this will serve until suitable maps are available.

### Conclusion.

The problems in the two National Forests visited were practically identical with those in the Southern parts of this Forest District. The U.S.F.S. has been able to spend a great deal more than we have on improvements, equipment and personnel, and have therefore developed a much more intensive fire prevention system. The methods followed are, to all intents and purposes the same and I am of the opinion that each Service may with profit observe the other's working. The attitude of the two Supervisors and their field officers that we met was cordial, and we are much indebted to them for their courtesy and frankness in explanation and discussion, both in the office and in the field. Invitations for a return visit were extended, and both Supervisors will probably be checking up this Service in their turn.

A. E. PARLOW.

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OCULAR DEMONSTRATION - MacPherson was a citizen of considerable prominence in his home town and, happening to be in London on the day of the Lord Mayor's Banquet, was invited to the Guildhall. On his return, he regaled his friend MacDougall with an account of the proceedings.

"Man," he said, "the dinner was magnificent, the service was superb, and the display most lavish. My teaspoon was solid gold!" "Is that a fact," said MacDougall. "Let's see it!"

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## WEATHER PHENOMENA IN RELATION TO FOREST PROTECTION.

E. B. Prowd.

In view of the practical application of scientific instruments as an aid to Forest Protection, such as the sling psychrometer and hydro-thermograph, it might be well to look into the question of weather changes and their causes in order that we may use to the greatest advantage the instruments in our hands. It is therefore proposed to briefly discuss the daily, seasonal and non-periodic changes of the weather with their causes, stressing those points bearing on Forest Protection.

Daily weather changes consist mainly of rise and fall of temperature. Radiation and insolation are the two main factors. There is as a consequence diurnal instability caused by the setting up of air currents by the expansion of heated air and the falling of cold air under the influence of gravity. These air movements are known as conventional currents. On the other hand we have nocturnal stability through the tendency for the colder air layers to arrange themselves along the surface of the earth and warmer layers still higher. The diurnal air movements give rise to such phenomena as land and sea breezes and mountain and valley breezes with which all are familiar. It may be noted that the former are effective for a distance of from 10 to 15 miles inland with velocity of about 2 miles per hour. The latter reach a somewhat greater velocity in that the cold air sliding down the mountain slopes under gravity adds its force to the air currents from other valleys and forms a breeze down the main valley. During the night the air movement is up the valley in an effort to reach the state of nocturnal stability.

Introducing the factor of atmospheric humidity, it may be readily understood why such phenomena as dew, frost and fog occur.

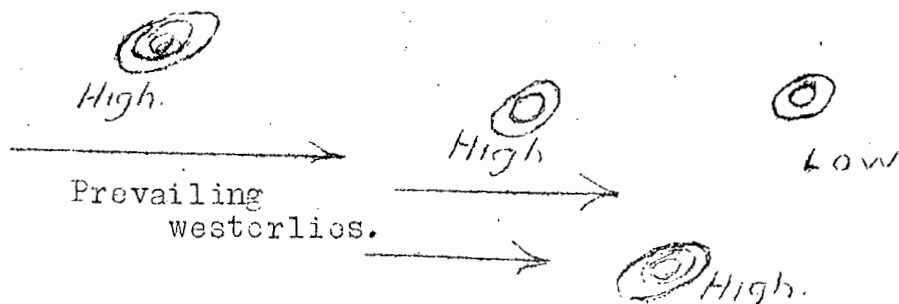
Seasonal weather changes will be discussed very briefly for they have but little effect on our fire hazard in B.C. in comparison with the non-periodic changes to be discussed below. Briefly then it may be said that the seasonal weather changes arise from the annual changes of temperature due to the annual motion of the earth with its tilted axis shifting the heat equator. Monsoons are the most outstanding weather disturbances.

The most important phase of weather changes in so far as we are directly concerned in this discussion is what is termed the non-periodical weather disturbance.

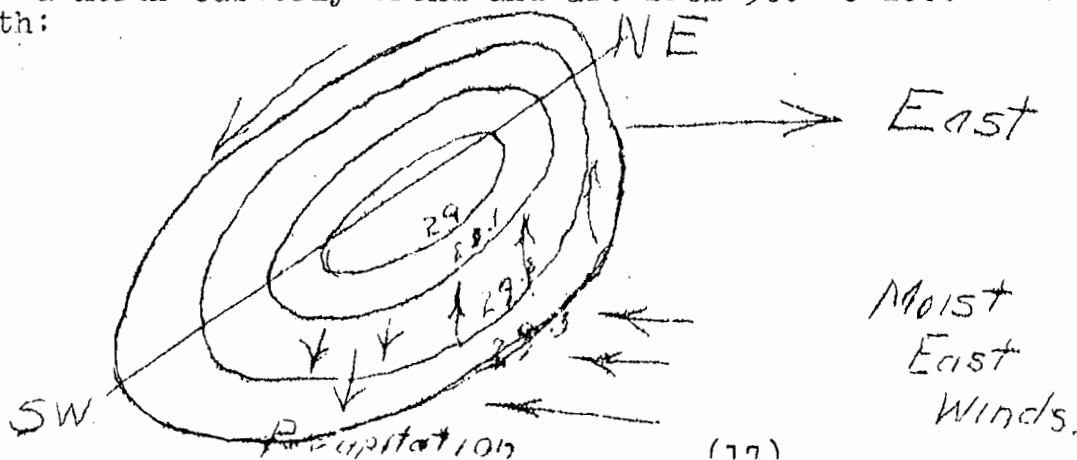
The changes of weather throughout the year are brought about by the somewhat regular succession of high and low pressure areas passing eastward, either directly over us or a little to the north or south.

The areas of low pressure originate in the prevailing westerlies and are extensive "holes in the atmosphere". Various theories exist as to their cause, the most widely accepted one being the "counter current theory". This theory explains their origin by the fact that cold masses of air from the poles meet with warm masses from the equatorial regions, causing the sinking of the colder air on the outside and the rise of warmer air on the inside. As the warmer air ascends its water particles condense to form clouds owing to the decrease in temperature of  $1.6^{\circ}\text{F.}$  for every 300 feet ascent. This theory in explaining the formation of low pressure areas also explains the high pressure areas which alternate with the low in crossing the continent.

The areas of low pressure, about  $1\frac{1}{2}$  miles in altitude, come in from the Pacific Ocean over Oregon, cross the Rocky Mountains into the Mississippi basin and then turn north and east passing down the Great Lakes and St. Lawrence basins to the Atlantic. They may also originate east of the Rocky Mountains, and travel east, roughly along the international boundary, down the Great Lakes and St. Lawrence basins. Again they may come in from the Pacific over Mexico, move up the Mississippi basin and out the St. Lawrence. This general course is followed because of permanent high areas over the North Pacific, west of Hudson Bay, and over the mid-Atlantic while a permanent low area lies over Iceland, thus:--



Each low pressure area has a counter clockwise motion at the rate of 30 - 40 miles per hour as well as an onward motion at the rate of 26 - 30 miles per hour during the summer and from 35 to 40 miles per hour in the winter season, which movements are explained by the counter current movement when cold and warm air masses meet, the latent heat freed by condensation and the easterly drift of the prevailing westerlies, or upper air currents. The low pressure areas may be represented as below with a north-easterly trend and are from 500 to 1000 miles in width:



As they approach from the west a warm, moist wind from the east or south-east blows into the low pressure area and just before the centre reaches us we have our precipitation due to the moist air being forced up to higher levels and condensation taking place. As the low area passes the winds veer around by the south and south-west if the centre of the area is north of us and back around by the north and north-west if south of us. As it passes we have cool westerly winds caused by the air moving over large, cool land masses into the low area east of us.

The period preceding the passage of a low area is known as the sirocco or warm wave, that following as the Bora or cold wave. The near approach of a low area is noted by cirrus clouds in advance, followed by stratus clouds and then rain.

It sometimes happens, as in the latter part of April and early May of this year, the low area, which are immediately followed by high pressure centres, swing north along the Pacific Coast then cross inland over Northern B.C. to Alberta and eastwards. This causes abnormally hazardous conditions due to the high temperature set up in the interior and accompanying easterly winds which blow over large, heated land masses and thus reduce atmospheric humidity to the danger point.

The above discussion fits both summer and winter seasons in general. However, in the winter season the passage of low and high areas is more frequent because of the greater masses of warm and cold air in the counter currents flowing from the equator and poles respectively and also because of the greater range of temperature north and south. The successive areas of high and low pressure also pass in a more southerly direction due to the shifting south of the permanent high pressure area west of Hudson Bay. Snow takes the place of rain because of lower temperatures.

Other non-periodic weather disturbances of particular interest to the interior forest protection force are the thunder storms. They occur in the summer season because of the convectional currents set up by large masses of heated air and are local in extent. Expansion of the heated air in masses causes the colder portions to fall by their own weight and thus forces upwards the warmer air. As the heated air rises it loses its capacity for moisture by reason of the cooling process in ascent and cumulus clouds are formed by the condensed vapor. The "thunder heads", so-called, then move forward leaving a trail of precipitation in their wake. They occur after prolonged hot spells. Surrounding air bodies moving into the storm centres, because of lower pressures set up, are elevated and moisture contained is condensed. Motion is obtained by latent heat freed by condensation and by convectional air currents.

The thunder storm means lightning strikes and, if conditions are right, forest fires. The lightning bolts arise from the accumulation of electric loads carried by the water

particles. All will have noted the increased precipitation after the electric discharge, and which is due to the coalescence of water drops when relieved of their electric load.

Cyclones will not be discussed as they are of rare occurrence in this province.

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### HISTORIC FOREST FIRES

- 1825. Great Miramichi Fire in New Brunswick.
- 1871. Peshtigo Fire in Wisconsin, burned 1,200,000 acres of timber and cost 1500 lives.  
The same year a Michigan fire burned 2,000,000 acres of timber and many lives were lost.
- 1881. Another Michigan fire burned 1,000,000 acres and cost 138 lives.
- 1894. The Philips fire, in Wisconsin, cost 300 lives.  
The same year, the Hinkley fire in Minnesota burned many towns and 528 lives were lost.
- 1908. The Great Crowsnest Fire in British Columbia.
- 1910. Forest fire in Northern Minnesota burned over huge area and more than 100 lives were lost.
- 1912. Another big forest fire occurred in Northern Michigan.
- 1916. Great fire in Northern Ontario, involving tremendous loss of life and property. Several towns wiped out and loss of life variously estimated at from 200 to 500.
- 1918. The Cloquet fire in Minnesota cost 1000 lives and resulted in \$50,000,000 damage.
- 1922. Great fire in Northern Ontario, extending over 700 square miles and involving a property loss of \$7,000,000.

KEEPING FIRE SUPPRESSION EXPENDITURES  
TO A MINIMUM.

---

W. R. Flumerfelt.

The above title may be taken two ways, one is the preparation or perfecting of an organization to catch fires in their incipency thereby curtailing expenditures, the second being the efficient and economical handling of a fire which has covered a larger area and developed into more or less of a conflagration.

The old saying that an ounce of prevention is worth a pound of cure fits this case very well, and serves as a boiled down answer to the question. Some fires, until the end, will get beyond control and become big ones, but intensive organization of men and resources will keep the number of these to a minimum.

During the past two years it has been strongly borne home to me that it is absolutely essential that money be spent on fires, but spent quickly and surely. One Ranger with 100 miles of territory cannot himself spend money quickly and surely in a lot of places, so he has to depend on his organization. He must know every man in his district, every man of foreman or straw boss material, and just whom he can get and trust to organize a crew and get a fire extinguished. This relieves the Forest Officer to go about his business which 95% of the time should be supervision and getting action. It is impossible that the Department can have field men enough to actually physically fight more than a very few fires in a season, and one of my fighting points is to see that the field man does not spend too much time on any one fire. Immediately he ties himself to any one or two fires the rest of his district is without a guardian of any kind, if his pre-organization is as it should be the field man should not have to spend much time on any one fire.

Last summer in the heat of the season, a ranger said to me "Its such a - - - - - bad fire day I am afraid to leave the phone". His organization was about as perfect as possible and that day he organized crews and extinguished eight fires from his headquarters.

In Supervisor District No. 4. during 1924, there were 297 fires which burned over 32,000 acres and cost the Department and operators in this district \$75,000.00 to extinguish 219 or 73% of these were caught and extinguished under 5 acres, at an average cost of \$ 33.02. 61 of the 219 were put out without cost, but 158 were actually fought with crews and extinguished at a cost of \$45.76 per fire. To quote further, 12 fires were extinguished under 10 acres at an average cost of \$134.32 and 14 under 20 acres at an average of 187.35. 28 under 100 acres at an average of \$357.76 and 24 only over 100 acres at an average cost of \$2229.80. I may say that these 24 fires covered much more than 100 acres each as they burned over an area of 30,000 acres or 1250 acres each. The 32,000 acres were extinguished at a cost of \$2.34 per acre.

Economy in fighting a larger fire can be practiced in many ways and again the secret of it is organization. Foreman and strawbosses who can be depended upon are the main stay of success. Every crew from 6 to 10 men should have a straw boss over them, and every 5 straw bosses crews a foreman. Fire lines should not be put in blindly, but a careful if quick reconnaissance made of the fire and surrounding country, and trails blazed out in a deliberate manner by men who know their work; a lot of needless expenditure has been caused on fires by putting in a trail which never could be used to advantage, and mistakes on a fire line are costly.

To go into the details of transportation, feeding time-keeping etc, etc., would need a lot of space, and I have already exceeded my 600 words.

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#### EXIT THE "SKINNER"

It might be interesting to record that the famous old Forest Branch Launch "R. J. Skinner" has been sold.

The old "Skinner" has been associated with the Forest Branch for years and was well known to all old-time loggers..

She has been sold to Mr. Orpana and has been re-christened to "Annie Sophia" by her new owner.

The change in name was part of the agreement of sale as the Launch was named after a well known and respected public official and we were not certain to what use the launch will be put now.

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## A SYMPOSIUM ON CHRISTMAS TREES

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When modern logging commenced in this province our most accessible forests began to disappear and large areas of logged off and burned over land were left in their place. These areas began to reproduce themselves at a very satisfactory rate and as soon as this timber reaches a suitable size, part of it is again cut and used as mine timber, ties, fence rails, posts, piles and poles. The very young trees are used for decorating purposes throughout the year by residents of this province and now the export to the U.S.A. of these young trees for Christmas trees has commenced.

Last Fall buyers came from the U.S.A. and let contracts for supplying these trees in car load lots. The prices paid were very low and most of the cutters only made fair wages and no stumpage was paid by them. The prices paid were from 2¢ for a 2' tree to 15¢ for a 12' tree; an average of 6¢ per tree. For this these contractors had to cut the trees with a wedge shaped point on the butt, tie them in bundles of six of the same height class (the buyers supplying the binder twine), haul to the railway siding, and load them on the cars. An average of 4000 trees were put on each box car. This price is far too low and will have to be increased so that the contractors can make money on longer hauls and allow for a stumpage being paid to the land owners.

A large profit must be made on these trees as they sell from \$1.00 to several dollars each at their destination and the cost of delivering these trees in Los Angeles would average 22.2¢ per tree to this should be added 5.5¢ per tree for risk which comes from non-sale after delivery and danger of the trees being packed when wet and sweating and moulding enroute. The cost is made up as follows: Cutting 6¢; Freight 13.7¢; Supervision 1.2¢; Binder Twine .8¢; Import duty .5¢; Risk 5.5¢; Total 27.7¢ per tree.

The areas five of these operators worked on were examined and all trees were cut off agricultural land near settlements and not likely to be used for growing timber. Clean cutting methods were not adopted for the following reasons:- 1st, Fir only was taken; 2nd, Trees to be accepted had to be grown in full light and otherwise perfect. The largest area I saw stripped of trees was 50' x 50'.

On Vancouver Island the cut of these trees for 1924 was about 96,000 trees. Part of these were exported and the remainder used locally. The average stand contains 2000 trees per acre, therefore 58 acres would be the area cut over which is very small; a fire of that size would be considered small yet it would destroy in a few hours enough trees to meet the demand for 1 year. Let us suppose the annual cut for this purpose in North America is

6,000,000 trees and the average stand contains 2,000 trees per acre; in that case the area cut over will represent 3,000 acres annually. These trees reach a suitable size in 10 years so the area to supply this demand in perpetuity would be 30,000 acres.

However it is not necessary to clean cut forest lands as young stands 10 years old contain as many as 9,000 trees per acre; at 30 years 3,500; and at 60 years or the end of the rapid growing stage 360. During the growth of this stand the smaller trees are being killed by the natural process of being over-topped and shaded out so it can be readily seen that at least from 500 to 1500 trees per acre could be removed from a stand 10 years old that would make Christmas trees without doing any real damage to the stand. Then again there is all the pasture lands that are continually growing up and at present being cut down and burned. When the farmers realize this opportunity they will save these trees for sale and this will bring employment to the farmer in his slack time and also bring in an extra profit from his land. A good example of this was noticed where a farmer had slashed and burned and fenced a 10 acre pasture in 1915. This has been used for pasture since, but no cutting done. This area now contains 1,000 trees per acre from 6' to 8' high and the owner said that he was willing to give them away as it only meant that he would have to cut down and burn them as they were shading his pasture.

I think a small export tax could be levied without doing any harm to the industry and no cutting should be allowed unless the owner had given permission and if kept under proper supervision this drain could go on without doing any harm to our future timber supply.

In conclusion I do not see why people should be severe with their criticism about such a small drain on our forests for such a worthy cause and if we were all to preach and practice the motto - Prevent Forest Fires - It Pays - we would not only have Christmas trees for our Yule-Tide festivities but timber for our mines and mills for years to come.

A.H. Waddington.

... ..

In going over the Annual Reports of the Rangers I find interesting comment from Rangers Benson and Pearson concerning the shipment of Christmas trees to the States and the effect of cutting these small trees on the growth and yield of the stand. Ranger Benson says:-

"The shipment of Christmas trees to the States was a new departure in this district, about three car-loads were shipped. I have been informed that the American Authorities in Washington and Oregon have prohibited the wholesale cutting of these small

trees, and this causes the persons who are interested to come to this side and denude our young forests. This is a matter I think should be gone into fully by the Department and a study made to see if our growing forests are liable to premature destruction if this industry gets a firm hold."

Ranger Pearson says:- "A new industry for Christmas trees opened up in the month of December and is possibly worthy of mention. A copy of one of the orders is noted below, being an order to fill 2 cars.

| No. trees | Size ft. | In bundle No. | Price each.<br>cents. |
|-----------|----------|---------------|-----------------------|
| 1332      | 2-3      | 8             | 2 ✓                   |
| 2000      | 3-4      | 6             | 3 ✓                   |
| 2690      | 5-6      | 4             | 4 ✓                   |
| 2080      | 7-8      | 3             | 7 ✓                   |
| 700       | 9-10     | 2             | 9 ✓                   |
| 60        | 12       | 1             | 15 ✓                  |
| 8         | 14       | 1             | 40 ✓                  |
| 2         | 16       | 1             | 80                    |
| 2         | 20       | 1             | 1.50                  |

This market provides work at a slack season of the year and could possibly bring in a small stumpage and Export revenue and still leave a profit to Operators.

It might also prove a profitable form of Forest growth, as also an economical method of thinning out reproduction."

You will note here the difference in opinion between the two Rangers concerning the effect of cutting Christmas trees and you will undoubtedly remember a report or two that appeared in the Canadian Forestry Journal, I think, a year or two ago by Professor Christie and one or two others the gist of which, if I remember correctly, was that the growth and cutting of Christmas trees should be a profitable form of forest management and not detrimental to the forest.

I thought these items might be of interest and might bring forward some comment from the other Districts. If the grand old game of Christmas celebration is to continue unabated, and apparently the merchants of the country intend that it shall increase in importance, there is likely to be an increasing demand for Christmas trees.

It would seem to me a subject worth a little thought so that we might be in a position to decide intelligently whether or not such operations are to be encouraged or discouraged provided we get a demand for Christmas trees from vacant Crown Land.

With reference to Ranger Benson's statement that the American Authorities had prohibited the wholesale cutting of

Christmas trees, I am advised that their prohibition is simply in the form of a prohibition of trespass. This simply means that people are prohibited from running out from town and cutting Christmas trees at will, a matter which really is covered by Common Law. They don't prohibit a man cutting on his own land.

It might also be pointed out that the number of trees shown on this order of two cars would cover not more than two or three acres of normally stocked stand. Possibly a stand fit for Christmas trees with open crown and this number of trees would cover five acres. In any case a not very serious loss compared to what goes up in smoke from a carelessly dropped match.

G. P. Melrose.

... ..

The properly regulated cutting of Christmas trees on overstocked vacant crown land should be a profitable form of forest management and would improve forest conditions, but unregulated cutting on sparsely stocked absolute forest lands would be mimical to good forestry.

The Christmas tree operations of the past years have been conducted on lands which will probably be cleared for agricultural purposes and no consideration has been given to future forest conditions and the owners consider it better to derive some revenue from the young trees than to slash and burn as has been the usual custom.

Where ranchers are operating on land which will not be cleared within a few years it should be more profitable however to select only the larger trees and leave the smaller low priced ones for a future cut.

If land were to be used for Christmas tree production alone and planting were necessary it would not pay at the prices quoted by Ranger Pearson to grow small trees and the market for large trees would probably be very limited. The seedlings and planting alone for Douglas Fir would cost between two and three cents per tree when carried out on a moderate scale and a thousand trees per acre were used. In addition to this there would be the cost of administration and protection, ground rent, cutting hauling and loading and interest on investment or profits. It would take about five years in the average site to produce three foot trees, but after seedlings reached this height the growth is more rapid and would average a foot or more per year. If the prices quoted by Rangers Pearson are F.O.B. they appear very low for small trees.

Converting the number of trees shown in the order to a normally stocked area basis is apt to be misleading as these do not represent the total production of normally stocked stands,

but are the healthiest and best specimens which have been selected from a large area; also the Christmas trees cut during the past season do not, in many cases, entail a loss but have yielded a revenue from a product which would have been wasted were there no demand for Christmas Trees.

J.L. Alexander.

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EXTRACT FROM LADY LOOKOUT'S DIARY.

Sept. 4th. This has been one hell of a day if I do say so. Rain, wind and hail. Have read everything from 'JUDGE' to 'SAUCY STORIES', talked about everything and everybody from Adam and Eve to this said year, and rang every living soul by phone within ringing distance. Have held my own hands, and all this without a thrill! Next year me for a real live wild man, Cold feet and cold nights sure are not the most thrilling of adventures. But, as I said, this has been one hell of a day. Good night!

Sept. 8th. Made two trips to spring. Rain did not bring results as I expected. No rush of Supervisors or Rangers to fill my tank or chop my wood.

Sept. 14th. Feel every sympathy for our leader and adviser for he has a touch of too much high life. Too many lonely mountain trips and lonely cold nights on the fire line!

---

WOMEN are like Automobiles --

It takes a lot of money to run one.

The faster they are the more money it takes.

They go faster when warmed up.

A little paint does a lot for both.

The heavy slow ones are used for work, not speed.

They need a guiding hand.

Each year the new models are faster and snappier.

If too many ornaments are put on, they look cheap.

## GRAPHIC SKETCH OF B.C. BUSH FIRE WINS PRIZE

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(Vancouver Daily Province, Oct.18,1924)

John O' London, the famous literary weekly, recently instituted a competition for the best brief picture of "Things Seen." First prize was awarded for the following graphic picture of the terrible forest fire which swept the Merville soldier settlement on Vancouver Island two years ago. It was written by "M.F.C."

"Six-fifteen on a stifling July evening, and through the shack door a picture of heavy crops and a distant background of forest veiled in haze.

"Mother was pulling two lusty youngsters from their tub. Buller lay panting on the step. Selina purred around my bare ankles. Peace!

"Then, suddenly, a roar arose far away like thunder, leaping intervening miles, shaking the shack like bombs. The misty, blue belt of giant furs became instantly a scarlet, racing wall of shrieking flames. Fire!

"In twenty seconds father had the car speeding right into the now dense fog. Mrs Wilford and her new baby! 'Highway!' he shouted, hoarsely, and we ran, madly, blindly - no time for shoes - through suffocating horror; the roses by the burning gate, our proud tomatoes, the ripening branches of gooseberries, now torches in the gloom; red tongues danced from cabbage to asparagus before our flying feet - over hot stones - to the open road.

"In twenty-seven minutes all was over. A strip of soldier settlement 'ripe unto harvest,' five miles long, three miles wide, with twenty-six new houses, gardens, barns, stock, pets, treasures, medals gone. Lives wrecked - and one boy, cutting wire fences to let his cattle escape, found - dead."

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### WHAT THE TREES SAY.

Ashes to ashes - and dust to dust,    If the  
loggers don't get us the cigarette must.

American Lumberman.

## NEW YEAR'S RESOLUTION

WHEREAS, on the first day of January, 1922 at the hour of 24.01 o'clock, there were assembled together, at the Ranger Station of the Fort George District at McBride, District of Cariboo, Province of British Columbia:- A QUORUM, to wit:

R. C. Davidson,  
R. A. Goddridge,  
Walter Wilson,  
Wm. Lowry.

And Whereas the same persons, above noted, were bachelors who acknowledged themselves to be just and upright men and of good moral character.

And Whereas, pursuant to a conversation among the above noted persons, (hereinafter referred to as the "Covenanters"), a meeting was called to order by Wm. Lowry.

It was moved that R. C. Davidson be appointed Chairman of a meeting of the aforesaid covenanters.

The motion was carried.

Moved and carried that the assembly partake of further refreshment.

The chairman then addressed the meeting. The gravity of the situation was emphasized. He pointed out that we were all unmarried and were therefore a nebulous factor in the destiny of the race. He suggested that such vacuity was inharmonious to the fuller expression of our potentialities.

Further proceedings were interrupted at this moment until refreshments had been dispensed.

The meeting then drew up a resolution befitting the occasion which was adopted on the motion of the secretary.

BE IT RESOLVED: That the above noted persons prosecute vigorously and with unremitting purpose a more definite objective in life than has hitherto been essayed.

That they shall bring about a more satisfactory condition of life notwithstanding the fact that the Covenanters herein mentioned have in their immediate outlook no particular ideal woman in view, yet, nevertheless agree to bind themselves to undertake to change the unsatisfactory condition of bachelorhood to the fuller and graver responsibilities of the benedict before the first day of January, 1925.

R.C.D.W.W.R.A.G.W.L.

"THE ADVANTAGES OF A STANDARD UNIFORM"

FOR FOREST OFFICERS?"

or

"SPIT AND POLISH".

---

(With apologies to the Editorial Committee.)

(By H. Oldham.)  
Penticton.

Whom remembers not that old army phrase "Spit and Polish" Dear old beans, somewhere in our midst there is one of those charming motherly, and companionable fellows; you know, sweetly dispositioned, benevolent, Regimental Sergeant Majors. (Probably from Chelsea.) One with an evil eye who can spot a speck of dirt on an otherwise gloriously bright buttons, at two hundred yards distance.

Or maybe after all he is one of our dear little 2nd Lieutenants.

But whoever he is, he cannot forget the dapper uniform, the brilliant badge, and the burnished button, and I know we shall love him when we meet him.

Never more old chappies will you wander at ease through the Mountains, biltmore hanging on the wrist, scale stick under the arm, compass in the old jacket pocket, and a tasty lunch hanging from the same nail that attaches the suspender to the dear old stagged pants. No and again, No, In fact absolutely not.

"For after Lenin, what?"

Regulation ZYX246, K.R. & O. adapted for the use of Forest Officers.

1. The Scale stick shall always be carried at the slope.
2. The Biltmore attached to the belt at the left side, bevelled edge to the front.
3. The compass shall be worn as a Decoration, on the right breast.
4. The tally register shall be worn as an Order, suspended from the neck by a pale pink ribbon.
5. No lunch other than Iron Rations, shall be carried, these shall be in a haversack, so suspended as to hang on the left side, hilt of biltmore to be clear of top of sack.
6. At no time may the tunic be removed, or unbuttoned, when on duty. (i.e. During the Closed season, from 3.30 a.m. to 3.30 a.m.)
7. Buttons and badges must be in a perpetual state of polish.

Can you not see it coming old things, the Patrolman will rank as Captain, the Asst. Ranger as Major, and so on. And how smart we shall all look. Dapper young sam will look pretty nifty when he takes his girl to the show, but imagine poor old Bill, after sleeping two nights in the woods.

But coming back to earth. If there is one time when a man wants comfort, it is when climbing the hills and mountains at 110° in the shade, if a man on such an occasion wishes to wear a bathing suit, then for Gods sake let him wear it.

A uniform would look very nice and smart, around the settlements, on main highways, and parks, a Patrolman with such a beat might find it very useful and effective, but for the average Forest officer when on the Highways, the scarlet box is more than sufficient, and when in the hills, there is seldom anybody but the rats and squirrels to see.

I dont think the fact that the Ranger is in uniform will cause the Operator to burn any more slash, although it might have a startling effect on *Dendroctonus monticolae*, and even effect *brevicomis*.

However, where "The Powers that be" could sweeten the pot, is by taking into consideration the fact that the average Field Officers pocket is annually picked by Fire Dragons of about fifty dollars. A dress allowance to cover this would probably be very welcome.

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#### FREE AD.

"Mother," cried little Mary, as she rushed into the farmhouse they were visiting, "Johnny wants the Listerine. He's just caught the cutest little black and white animal, and he thinks it's got halitosis." - Exchange.

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#### ASSERTING HIS PREROGATIVE

Man (in the barber chair): "For goodness sake be careful not to cut my hair too short, or someone will go mistaking me for my wife."

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WHERE THEY GO:

Statistical Report 31YY-1-b Uses of Paper Clips,  
per 100,000.

August 8, 1923.

|                                                     |            |
|-----------------------------------------------------|------------|
| Pipe Cleaners                                       | 3,324.     |
| Emergency Garter Clasps                             | 3,707      |
| Home-made Key rings                                 | 2,429      |
| Substitute Suspender Buttons                        | 1,735      |
| Picking Locks                                       | 1,060      |
| Cleaning Typewriter Type                            | 4,290      |
| Lingerie Clasps                                     | 5,304      |
| Toothpicks                                          | 2,096      |
| Lapel Ornaments (Juvenile)                          | 1,925      |
| Nutpicks                                            | 18,630     |
| Blackhead Removers                                  | 1,428      |
| Necktie Clasps                                      | 1,607      |
| Hairpins                                            | 5,143      |
| Finger nail Cleaners                                | 5,031      |
| Cleaning Out Fountain Pen Feeds                     | 1,426      |
| Wiring Down Corks on Home Brew                      | 7,829      |
| Button Hooks                                        | 7,345      |
| Bobbed Hair Restainers                              | 14,759     |
| Non-skid Devices for Ladies' Belts                  | 2,550      |
| Repairs on Typewriters, Fans & Pencil<br>Charpeners | 3,237      |
| Mosquito-Bite Scratchers                            | 17,363     |
| Ear Reamers                                         | 2,926      |
| <u>Clipping Papers Together</u>                     | <u>627</u> |

Total..... 100,000

(Correct) H.E. Snickers,  
Efficiency Expert.

(Approved) I.M. Fuller-Figgors,  
Supt. of Statistics.

(W.C.O.)

This report will never be issued again, because those last three  
letters mean; To be reissued. "When Changes Occur."  
--- The Echo.

WHEN YOU COME TO THE END OF A PERFECT DAY.

---

A sawmill man one morn got up  
And found the sun was bright  
His breakfast food, each plate and cup,  
And ev'rything was right.  
He heard the morning whistle blow,  
And heard the saws begin  
Their singing in the vale below,  
The day to usher in.

And then he wandered to the mill--  
Found every man in place  
And each one working with a will  
And with a smiling face.  
The logs came up without a hitch  
To saws as sharp as swords;  
Each cut produced a perfect flitch,  
Each flitch the best of boards.

And not a pulley slipped a belt,  
And life was just a song;  
The logs to lumber seemed to melt  
And not a thing went wrong.  
The morning mail some orders brought  
And cancellations none;  
In all the letters there was not  
A kick from anyone.

All day the mill, from early dawn,  
Till night began to fall,  
Kept working on and sawing on  
Without a break at all.  
At last the mill man homeward sped  
Without a woe or care  
And, kneeling by his little bed,  
He prayed this little prayer.

"O Lord, I know that sometime I  
Will have to perish, too--  
I know that sometime I shall die,  
For people often do.  
Today we never spoiled a board  
And everything went right--  
If it is all the same, O Lord,  
I'd like to die tonight.

--Author unknown.