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ROOT AND BRANCH

BRITISH COLUMBIA FOREST SERVICE LANDS DEPARTMENT

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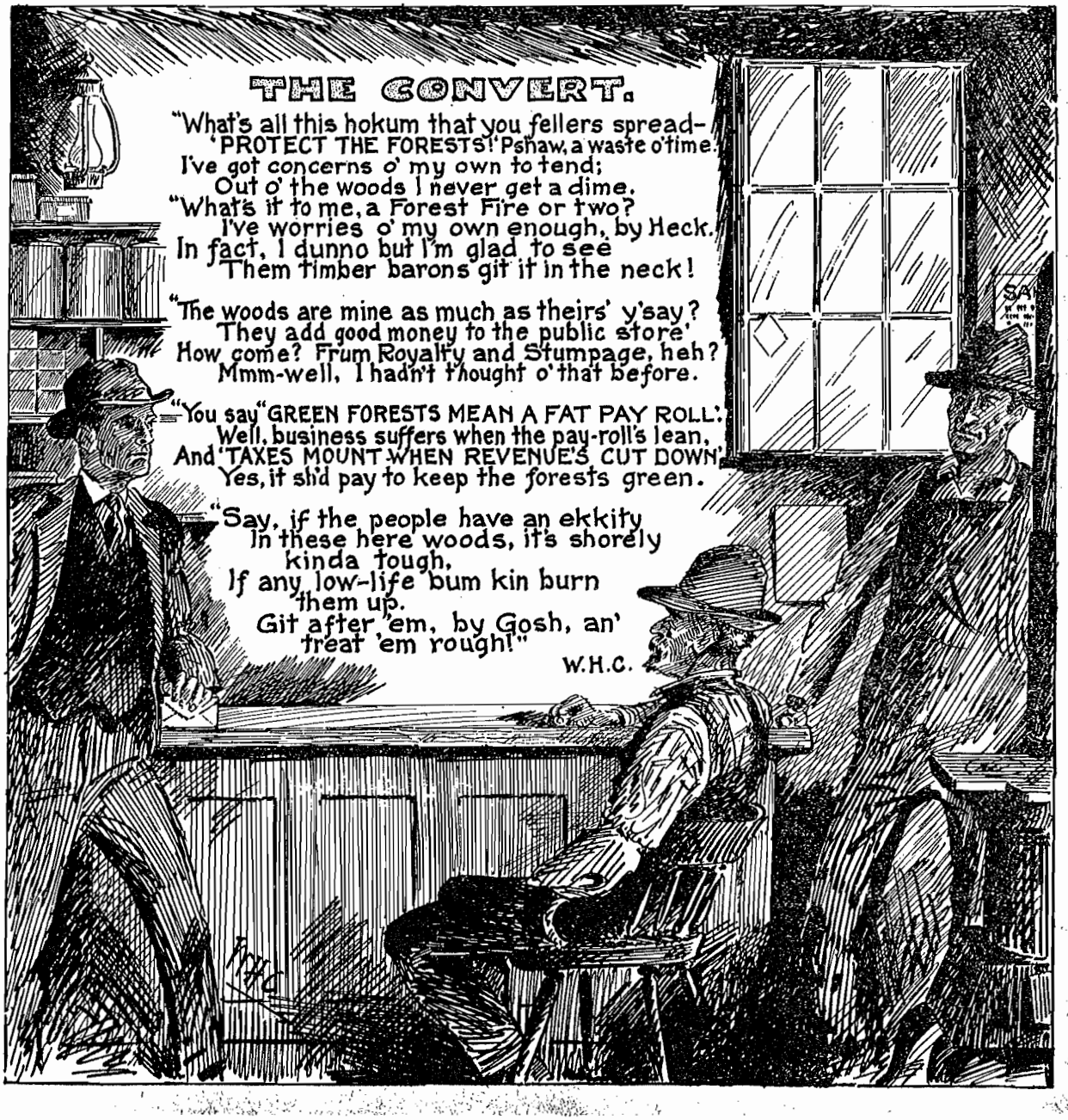

This magazine is a staff publication, and is not in any sense a medium for the expression of Governmental policy.

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.

UNIFORMS

(A.E.Parlow, District Forester
Vernon.)

There is no question, that this Service can get along without uniforms. We have done business fairly successfully without them for quite a few years. On the other hand I believe that certain definite advantages would result from plain businesslike uniform being worn by all forest officers. Our personnel changes in each locality from time to time and this is even more the case with the various operators. Mr. Manning is not the only member of the Service who has been offered a job by an operator, or whose climbing over a logging operation has been looked on with suspicion, also one's position in turning out a reluctant fire-crew is stronger, if there is no preliminary question of explaining who you are and what your authority is. Every forest officer is also, or should be, a constant propagandist and while it might destroy one's comfortable privacy on boat or train or stage, the uniform would undoubtedly establish more frequent contacts with the travelling public. As for the argument that ex-service men hate uniform, - there may be ex-officers who object to wearing it, personally I do not know of a genuine case, and in this Service we are all 'forest officers'. The uniform would represent an organization that stands for absolute honesty, and for efficiency, not too common unfortunately in public services in this World, and which has the respect of the public. I for one would be proud to wear it.

The uniform should be of good material, decently cut and the same for 'all ranks'. Small insignia of rank might be worn if thought necessary, but such badges would be unintelligible to the general public, and are scarcely necessary within the Service as one knows the name and rank of everyone one is apt to meet. Standard styles should be approved for a plain tunic, - (bellows pockets carry a surprising amount without looking unsightly), slacks, breeches, or shorts at the will of the wearer, a felt hat for warm weather and a fur hat for cold, no brass buttons, service stripes, or other 'Christmas Tree' effects are necessary or desirable. It has been suggested that serges and whipcords, etc. intened for war materials, might be purchased very cheaply in bulk. I can answer for the remarkable wearing quality of such cloth. The colour is not conspicous, does not fade with wind, sun and rain, and is made presentable again after usage that would ruin ordinary clothes, by brushing.

I would suggest that wearing of uniform might be made optional, as it was in the U.S.F.S.; in Quebec I believe the Forest uniform is an issue, and the wearing of it is required. If the Forest Officer buys his own uniform the extra quality and service will be a saving, one outfit of the materials mentioned above, should outwear two or three ordinary suits, or if, as is preferrable, a clothing allowance is available, the 'option' will very probably be exercised in all cases.

... ...

COMMENTING ON THE ARTICLE OF 'UNIFORMS' BY MR. PARLOW

MR. ST.CLAIR SAYS:

"I am glad to see that someone has come to the defence of the pro side of the Uniform Question and I wish to congratulate the writer on the able and concise way in which he has presented his arguments. He speaks of the policy of the U. S. Forest Service and it so happens that a part of the U. S. F. S. Administrative Manual recently revised came onto my desk about a week ago, and I am quoting below what it says about Uniforms, together with specifications etc. This is only information to show how the problem is handled elsewhere. I have no doubt but that we can design a much more serviceable and attractive article if we set our minds to it."

Uniforms

REG. A-1. FOREST OFFICERS AND EMPLOYEES ASSIGNED TO FIELD DUTY MAY BE REQUIRED, UNDER SUCH CONDITIONS AS THE FORESTER MAY PRESCRIBE, TO FURNISH AT THEIR OWN EXPENSE CLOTHING OF STANDARD DESIGNS AND MATERIALS FOR THEIR PERSONAL USE IN THE PERFORMANCE OF OFFICIAL DUTY.

SPECIFICATIONS FOR STANDARD FOREST SERVICE UNIFORM

Color.--Forestry green.

Fabric.--Unfinished worsted, weight 13, 16, 18, or 20 oz. Serge, weight 12, 14 or 16 oz. Whipcord, weight 16 or 18 oz. Cotton khaki.

Coat

Modified Norfolk.--Three button, single breasted, notched collar, semi-form fitting, yoke on back and front, belt at natural waist line stitched on and bottom button in center of belt. Box plait 1-3/4 inch wide on each front extending from bottom of yoke to top edge of belt. Box plait 2 inches wide in center of back extending from bottom of yoke to top edge of belt. Vent in back extending up to belt. Two side patch pockets, 8 inches wide and 9 inches deep, fitted with flaps rounded at corners, 3 inches deep in center and secured with hole and button. Inside pocket right breast. Outside pocket left breast, opening under plait. Coat may be one-quarter lined or full lined. Body lining to be of good quality, durable Italian cloth or serge of proper shade. Sleeve linings, canvas, and other trimmings to be of good quality.

Optional Features.--Two box plaits in back. Four button style with loose belt. Full lining. Special shoulder padding. Back without vent.

Breeches

To be cut medium or full in thighs, laced in side seam from about 2 inches below the knee to the bottom. Knee strapping of buckskin, or same material as breeches, to extend well over the knee cap and far enough above and below the knee to give ample protection. Two front top pockets; two hip and one watch front pockets with hole and button. Hip pockets with flap to button. Six belt loops to engage 1-1/2 inch belt, or side tunnels with one loop at front end of each front pocket and one loop 1-1/2 inches down from top of seat seam. Fly and suspender buttons of ivory, suspender buttons on inside. Pockets to be made of good durable pocketing, other trimmings to be of good quality.

Trousers

Straight cut without cuffs. Two side, two hip, and one watch pocket. Hip pockets with flap to button. Six belt loops to engage 1-1/2 inch belt or side tunnels with one loop on each front and one loop 1-1/2 inches down from top of edges of seat seam. Fly and suspender buttons of ivory. Suspender buttons on inside. Pockets to be made of good durable pocketing, other trimmings to be of good quality.

Buttons

Vegetable ivory buttons bearing pine tree design and legend as approved by the Forest Service. Color to harmonize with uniform.

Hat.

Color.--Gray (Belgian Belly)
Quality--Nutria or better.
Style-- Western low sombero or soft Stetson. Height of crown and width and style of brim, optional with wearer.

Puttees

Color--Dark tan.
Material--Pig skin or cowhide.

Spiral Puttees

Color--Forestry green preferred.
Fabric--Woven woolen cloth, cordovan, etc.
Style--Men's army style spiral puttees.

Shirt

Color--Forestry green or olive drab.
Fabric--Flannel, khaki, or other material harmonizing with uniform
Style--Soft, flat or band collar with links, two large button-down pockets. Forest Service buttons. White shirt with soft or stiff collar optional.

Necktie

Color.--Black or dark green
Fabric.--Optional
Style.--Optional

For Optional Wear

Vest

Color.--Forestry green.
Fabric.--Unfinished worsted, weight 13, 16, 18, or 20 oz. Serge, weight 12, 14, or 16 oz. Whipcord, weight 16 or 18 oz. Cotton khaki.
Style.--Single breasted, high cut style, 4 outside pockets, 1 inside pocket, right breast, Forest Service buttons.

Cruising Coat

As commonly worn in the Northwest.

Khaki Cruisers Shirt

High Topped Shoes or Riding Boots

In lieu of puttees or spirals.

Mackinaw Coat.

Color.--Forestry green
Fabric.--Heavy mackinaw worsted.
Style.--Subject to modification by manufacture or in accordance with personal preference. Cut flush at neck; 4 button, double breasted; 2 side pockets 8 inches wide and 9 inches deep, fitted with round corner buttons flaps 3 inches deep at center; inside pocket right breast; 3 inch belt with two buttons held by three belt loops; Forest Service Buttons.

Cap

Color.--Forestry green
Fabric.--Heavy worsted.
Style.--English army officers fatigue cap, or golf cap, scant fullness, flexible leather visor.

E. T. ALLEN ON "SLASH BURNING".

In August ROOT AND BRANCH, Mr. G. P. Melrose discusses slash burning with implied suspicion that even in Douglas fir it may not be as practicable as attempted absolute fire prevention. Has such an idea any considerable support among your experts?

As you know, we have compulsory slash burning laws down here, based on quite general belief that it is consistent with good silviculture to reduce for protective purposes the slash accumulation which constitutes our greatest hazard. Our doctrine is to burn once, preferably before the first start of fir seedlings, then try to protect.

We realize that this single burning does not remove the hazard, but it must reduce it, also make easier the control of fire that may occur. Cutover lands remain dangerous until well restocked, but even so we can hardly contemplate the greater danger that would exist, considering also the march of operation toward that future situation when timbered lands will be but islands in a sea of cutover land, if the latter remains slash-covered. As a matter of fact we think it would not so remain, but that fire would get in, some bad year, in spite of protective effort, and result in a catastrophe without precedent in American history.

As for the silvicultural aspect -- reforestation -- we also quite generally accept the Hoffman theory of stored seed and its release by fire; not so much, perhaps, as a theory that he has demonstrated, as a plausible explanation of what was long before observed. It was earlier conceded as a rule that where fire has occurred, without frequent recurrence, we find fir. And where it has not, that we commonly find not only more hazard but also a heavier percentage of less desirable reproduction which is apparently related to a ragged, wind-exposed advance growth of other species which constituted an understory beneath the fir.

All of which does admit of much theorizing as to silviculture and which, as such, invites counter-theorizing equally interesting. But I must say that practically, in a working majority of cases, it seems to many folks down here unimportant because in any case there is reproduction if recurring fire can be prevented. Theoretically, spring burning before the seed sprouts is better than fall burning after it sprouts. Actually, if there has been no recurring fire, both natural and slash burns seem to restock with fair uniformity and it is a fair supposition that most accidental fires have been in fall or late summer. And I'm not prepared to argue that, if we could find any considerable proportion of such to afford fair evidence, we wouldn't also find unburned slash areas restocking satisfactorily.

So from the standpoint of those mainly responsible not for silvicultural theory but for doing the work and getting results,

we quite unanimously down here have concluded that the real fire problem, after all, seems to be controlling fire on the cutover lands so it wont destroy either reproduction or life, property, adjoining timber, and the activities without which neither old nor new forests can be utilized. Can this be done with heavy fir slashings unburned? To those who have it to do, the"over-shadowing fear of the slash area" is likely to be over-shadowing; not easily disposed of, unless God changes the climate, by an academic argument. It has been extremely gratifying to them to be told that silviculture does not complicate the problem, but without argument calls for the same effort. If this does not remain true, we are sure in for complications.

In the pine type, on the contrary, the trend with us is undoubtedly toward leaving slash lie and strengthening protection until it rots down. This is coming to be the recommendation of the silviculturists. It does not at all clash with the views of the protection agencies. In the mixed woods like those of North Idaho, both silviculture and protection are coming to agree on piling, for neither broadcast burning nor risking unburned slash seems satisfactory.

In other words, we have been assuring ourselves that instead of developing conflict, our better knowledge of all angles of forest management is coming to harmonize the requirements of silviculture and protection and thus to simplify public and industrial policy and the laws thereby involved. If this proves wrong, in any type so important as fir, it will be troublesome on both sides of the line.

I've gone to this length not at all to be critical or controversial but solely to make myself understood in the questions I'm asking you. We want to profit all we can from B. C. studies and wisdom. Do you think you are really discovering any grounds for considering the abandonment of slash burning in the coast fir type? If so, has there been any practical consideration and estimate of the alternative protection of unburned slash areas?

HOW IT HAPPENED

A lumberjack with a broken leg was taken to a hospital for treatment. After the leg had been set, the nurse asked him how the accident occurred. He replied:

"You see, Ma'am, it was this way: I was skyhooking for the Potlach Lumber Company and I had only one ground line. He sent up a big blue butt that was a heavy one. I saw her yaw and yelled to him to give her a St. Croix, instead of which he threw a sag and gunned her, and that broke my leg."

"Yes," the nurse replied, "but I don't exactly understand."

"Neither do I," said the lumberjack. "That darn fool must have been crazy."

... ...

"UNEASY LIES THE HEAD-------"

(G. R. Naden)

For a month or two now I have been giving readers of "ROOT AND BRANCH" a rest, but the fire was burning briskly in the grate and the pipe was drawing freely, and so instead of reading I was just lazily looking at the flames, and thought I would give you another fireside soliloquy.

I know that a lot of you out in the field think sometimes that the fellows at Head Office don't know much about things. You are asked for a report and a recommendation, and you give a good report and make a recommendation, and find afterwards that the recommendation has been turned down, and that all your work was practically wasted.

It might be that, looking at it on the ground, there was only one thing to do, and Head Office was either ignorant or stupid, or turned down the recommendation through pure "cussedness."

At Head Office we really try to put ourselves in your place, and to see your point of view, and maybe your views are right but still cannot be accepted.

If we try to see through your eyes, you must also be prepared to try to see something of what we have to contend with, and so I thought I would tell you how the running of the Forest Branch looks to me.

A Ranger is interested principally in his Ranger District, and looks after his Assistant Rangers and Patrolmen, and does the best he can with the tools at his disposal. A Supervisor takes in more territory and has to consider problems in relation to several districts instead of only one. He is not so familiar with the details of any one district as the Ranger, but he knows more about the Supervisor's District, and any suggestions made to him by a Ranger must be considered in relation to the other Ranger Districts under his supervision.

A Ranger may make a request to his Supervisor for an appropriation for something which he thinks is absolutely necessary, but which cannot be granted because there is only so much allotted for the Supervisor's district, and the other Rangers would suffer.

A District Forester has perhaps several Supervisor Districts in his Forest District, and his territory must be administered as a whole and a request from a Supervisor considered in its relation to the the other Supervisor Districts.

The Chief Forester and his Assistants at Head Office have all the Forest Districts in the Province to administer and

requests from any District Forester must be considered in relation to the other Forest Districts.

Had the Chief Forester unlimited means at his disposal, it would be easy, but the chain is not complete yet. There are four Branches in the Department of Lands, and when the Chief Forester makes a request to the Deputy Minister it must be considered in relation to the other Branches.

Surely, one would think, we are getting to the end of the chain. But after that, the Minister has to be consulted, and perhaps he may have to take it up with the Premier, who in turn may wish to discuss it with the other Members of the Executive Council.

When it gets to the Executive Council, not only has the request of the Lands Department to be considered in relation to the other Departments but, it may be, in relation to the other Provinces of the Dominion, and particularly as to whether it would be approved of by a majority of the Members of the Legislature.

The Members of the Legislature in considering the question are probably influenced by the effect it may have upon the people in their constituencies, who have the final say as to whether they retain their seats in the Legislative Assembly or not.

Some of the questions do not even end there, but may have to be considered by the Dominion and the Imperial Houses of Commons. When it gets to the Imperial House, it not only has to be considered in relation to the Provinces in any one Dominion but in relation to the different Dominions and Crown Colonies within the Empire, and may perhaps affect the relationship of the Empire with other Nations of the World.

All that I have written may seem very far fetched, and even silly, but to give an answer to a very simple question which may at any time be asked of a Ranger might involve everybody mentioned. For example, a Logger asked a Ranger if he could employ a subject of the Japanese Empire to work on his timber sale or Licence. This brings me back to the starting point again, and I repeat that while Head Office officials try to realise the viewpoint of the man in the field, it is also necessary for the field men to try to visualize some of the problems of the Head Office.

In whatever position a man is, he should try to broaden his horizon so that if need be he can step in at any time to take another step upward. It is an old saying, but none the less true, that "There is always room at the top."

Another observation, and then I will quit for tonight. As a man's responsibility increases his freedom of action diminishes. A day labourer has infinitely more freedom than a Premier. Work this out for yourself, and if you don't think it is true let us have your reasons in another issue of "ROOT AND BRANCH".

FOREST PROTECTION CREWS, (VOLUNTARY)

(J. McK. Burge, Nelson,)

I have the honour to submit for your consideration a suggestion in connection with "Fire Protection of Forests!"

It is necessary to point out that this idea applies to locations in the Province where lightning hazard is continuous year after year, and where areas show heavy expenditure by the Government for Fire Fighting.

1. A fire crew to consist of eight men picked from hazardous area, but not all from one settlement; spread of men within twenty to thirty mile area would be suitable.

The selected crew to be given Fire Fighting instructions for two weeks during the early part of each spring, and to be paid and meals provided by the Forest Branch the same as if actually on a fire.

Each member of crew must undertake to take immediate action of the outbreak of fire, without waiting for instruction from the Ranger or Assistant Ranger of the area.

Attention being paid to the type of man selected.

(Yearly instruction to depend upon the necessity of new members to fill vacancies which may occur.)

2. Instruction should be given in the handling of pumps and gear; all parts of pumps with names be memorized by the whole crew, taken down and assembled until each man is thoroughly conversant with the mechanism and working capacity.

The crew of eight to be numbered the same as a Machine Gun Crew except that two crews should be made up from No. 1 to No.4, but each man should be interchangeable having had thorough instruction and taking into consideration availability in regard to sickness or unforseen circumstances.

Four days to be allowed for instruction in the use of pumps, with lectures covering the different methods of Fighting Fire as usually adopted for the area in which they are called upon to work.

3. Lectures on the different methods of Fire Fighting to be demonstrated in the field for 10 days, trenches direct, indirect and parallel methods should be explained and worked out, and differences of fires on the flat, hill side and Crown Fires explained. Camp cooking also.

4. Each member of Crew should have a Fire Fighting tool in his possession and should take two days rations supplied by himself, so as to enable the Assistant Ranger to organize as necessity demands.

It is understood that a message by phone, or any other quick method of despatch, must be sent to the Officer in charge of the area where fire has occurred, so that action can be taken to extend operations and get down to a working basis as quickly as possible.

5. Crew being spread over a considerable area should be most efficient in dealing with lightning strikes in the early stages, demanding from two to four men, more often two.

Large fires would necessitate the action of the Forest Officer to bring together the whole crew for concerted action when required.

6. See paragraph 2. Lectures. The Forest Act should be explained re fires on logging operations, Railway Right of ways, etc. to protect the interests of the Service.

EDITORIAL COMMENT

While we are glad to receive this communication from Assistant Ranger Burge, and realize that it shows that considerable thought has been spent on the Forest Protection problem, at the same time, the following points occur:-

1. That where the lightning belts occur, it is proposed to take care of this by having a permanent improvement crew at work within these belts, so far as funds available will allow. These men could then be doing useful work such as trail construction, which would hardly cost more than the scheme outlined, but the whole thing is limited by the size of our income. As regards each member of this crew taking action as soon as a fire occurs, this is the duty laid upon every citizen of the Province, by Statute. Further, because a man is given two weeks instruction in the art of fire fighting (and that only verbally) would not say that this man would find it convenient to fight fire or take the first step when a lightning fire did occur. We would not have any tie upon his services, and there is nothing to show that we would receive value for the money expended other than we would make the best guess we could at the type of man picked for the instruction suggested.

2. Instruction in pumps so that each pump could be taken down, is open to too many objections to be put into force at present. When a machine gun is taken down it will only go together in one way. If it does not go together then it won't work. A gas engine can be taken down and put together and will not work. It requires expert knowledge to do this and it is not thought that we are in a position to practically invite men to take down gasoline engines. Hitherto, we have tried to avoid this very thing.

3. There is no doubt that instruction in fire fighting would be a big help, and for this reason we issue different publications, but on the other hand, each fire practically presents its own problem, and it is the man with general experience who wins out. As a matter of fact, the thing we have got to educate the public to is the absolute necessity for rapid action.

From what we know of camp cooking it would appear that most men can get by, and after all that is all that is really necessary.

4. The points outlined in suggestion 4 are covered by the instructions that should be given to Volunteer Fire Wardens, with the exception of having two days' rations already issued. This hardly appears to be a desirable feature, although it might work out very well.

5 & 6. These are already covered by a book of instructions.

It would appear from the foregoing that we are not amenable for suggestions, but the reverse is true. The big point to keep in mind is that there is little use of "taking two bites at a cherry", and we hope that 1924 will see us in a position to put in the permanent crews, which is, after all, the most desirable thing to do, and will more than cover the suggestions outlined in point No. 1.

FIRE PREVENTION

During December the Hon. Mr. Stewart, Minister of the Interior, sent out invitations to the Provincial Ministers in charge of forests and their principal technical official to attend a meeting in Ottawa, January 7th to 11th to discuss; ways and means for furthering Forest Fire Prevention, and in what way, if any, the Federal Government could co-operate with the Provinces in the Solution of this question. This meeting was the first of its kind ever held in Canada.

During the five days of Conference the subject was very fully canvassed from many sides - many points of common interest were shown to exist. On the other hand widely differing conditions had to be met. Especially was this true of Coast conditions in British Columbia.

The meeting brought out the point that the greatest need throughout Canada was publicity and further financial support in order to refine our prevention service to a point of efficiency where the fire losses would be reduced to an insurable amount. The Federal Government did not appear to be prepared at the present time to offer any direct financial aid in recognition of the national aspect of our forest problem such as is done in the United States under the Week's Law.

Where various organizations were giving service along lines allied to forest fire prevention full co-operation was promised.

A number of resolutions bearing on the subject were adopted by the meeting. These are given below and I believe the meeting has opened a door for further co-operative work in future.

(P. Z. C.)

... ...

RESOLUTIONS PASSED AT THE FOREST FIRE PREVENTION CONFERENCE

January, 1924

Resolution No.1.

WHEREAS forest fire prevention has become a highly specialized problem requiring trained personnel for efficiency, resolved that in the opinion of this Conference there is urgent need for the establishment of instructional courses for Service personnel immediately subsequent to their assignment for duty.

Resolution No.2.

WHEREAS agriculture and forestry are not opposed but supplementary, agriculture requiring the better lands, and forestry those incapable of agricultural development, and WHEREAS the fire hazard resulting from uncontrolled settlement in forest regions has proved a great menace to our timber supplies, RESOLVED that in the opinion of this Conference there is urgent need for the development of definite policies looking to the direction of settlement to lands which are of bona fide value for agricultural purposes; such settlement should proceed step by step to allow for proper development of community facilities.

Resolution No.3.

WHEREAS the proper direction of settlement can only be based on thorough land classification, RESOLVED that this Conference record its conviction that land classification should precede settlement.

Resolution No.4.

WHEREAS the maintenance of the forest cover in certain parts of each watershed is essential for the regulation of the stream flow, and WHEREAS the permanent retention of absolute forest lands for continuous timber production is fundamental to a proper forest policy, and WHEREAS it is also essential in fire protection, RESOLVED that in the opinion of this Conference all lands found by proper land classification to be suitable only for forest purposes, either for timber production or watershed protection, should be set aside in permanent national or provincial forests.

Resolution No.5.

WHEREAS the education of the children in the schools of the importance of protection of our forests from fire is of the utmost importance, be it RESOLVED that the Provincial Forest Services should consider it a part of their function to get into as close co-operation with their respective Departments of Education as possible in order that the widest facilities may be secured for educational work amongst the school children on forestry problems.

Resolution No.6.

WHEREAS it is desirable that there should be some central clearing house for the collection and dissemination of publicity material in connection with forest fire prevention problems, and WHEREAS in the opinion of the provincial authorities it is desirable that the Dominion Forest Service should act in this capacity, RESOLVED that the Dominion Government be requested to provide the necessary facilities in the Dominion Forest Service to enable them to undertake this work. RESOLVED further that as the experience of all forest services is that the ordinary administrative

officers have not the time nor the specialized training necessary to carry out this class of duties, that there should be appointed in the Dominion Forest Service a qualified Director of Publicity whose special duties should be to handle such educational campaigns

Resolution No.7.

WHEREAS a burning permit law properly enforced is the only known method of controlling the fire hazard in forest districts, RESOLVED that this Conference records its conviction that such burning permit laws should be universal in all provinces of the Dominion.

Resolution No.8.

WHEREAS the debris resulting from logging operations constitutes one of the greatest menaces to the timber supplies of Canada, and WHEREAS The disposal of such debris by closer utilization or by burning are the only solutions to this problem. RESOLVED that, first, a program of technical research into the possible use of material now wasted should be inaugurated by the Forest Products Laboratories and that in the opinion of this Conference further facilities in personnel and appropriations should be provided by the Federal Government for this purpose, and second, that until such utilization is possible steps must be taken to dispose of slash by the enforcement of proper methods of disposal by fire. This Conference records its conviction that there must be co-operation between the various governments looking to the adoption of concurrent regulations in this connection. An exception must be made in the case of the Coast district of British Columbia where, owing to peculiar conditions, further study and research is necessary to determine the proper procedure in slash disposal.

Resolution No.9.

WHEREAS experience has shown that forest protection can only be obtained under conditions wherein the forest authority has complete control of all forest activities on the lands under their jurisdiction, RESOLVED that this Conference recommends to all governments concerned the necessities of concentrating all matters pertaining to the forest under a unified forest service.

Resolution No.10.

WHEREAS in many parts of Canada the use of aircraft offers the only possible solution of the problems of forest fire prevention, and WHEREAS the expenditure involved is beyond the financial means of forest authorities, RESOLVED that this Conference recommends that the Dominion Government should provide substantial assistance to the provinces, either by the donation of air service facilites or by subsidies to the provincial forest authorities sufficient to allow them to obtain service from commercial aircraft companies.

Resolution No.11.

WHEREAS experience has demonstrated that the use of meteorological data is of extreme value in forest fire prevention. RESOLVED that this Conference urges the Dominion Government to provide facilities for study and research by the Meteorological Service as to the means in which meteorological data can be applied usefully to fire prevention and to arrange for co-operation by said Service with the various forest authorities in Canada.

Resolution No.12.

WHEREAS education and publicity work to be effective must be based on reliable information and WHEREAS the present data collected by the various forest services with respect to forest fires and forest fire losses lacks uniformity, RESOLVED that in the opinion of this Conference there is need for standardization of methods and for the creation of a clearing house through which such information can be collected and disseminated; RESOLVED further that in the opinion of this Conference the Dominion Government through the Dominion Forest Service should undertake this work.

Resolution No.13

WHEREAS forest fire control depends to a large extent on the ability of forest authorities to receive reports of and to get on the fire without delay, and WHEREAS at the present time this object is hampered in this respect by the lack of means of detection such as lookouts, telephones, trails, etc., be it RESOLVED that this Conference records its conviction that the forest authorities should immediately undertake a program for completion of such forest improvements within the shortest time possible.

Resolution No.14.

RESOLVED that in the opinion of this convention forest authority should concentrate on Save the Forest Week, and that the proclamation with reference to Fire Prevention Week issued in the fall should bear no reference to forest fires. RESOLVED further that for the year 1924 we recommend the date selected to be the week April 27th to May 3rd.

STUMPAGE APPRAISALS.

(Being a criticism by F. D. Mulholland (Vancouver) on Stumpage Appraisal by Ranger E. F. Wynne Heath and a reply by the latter)

Your publication of Ranger Heath's appraisal of tie timber will be especially interesting to other Rangers on the G. T. P. Railway. It brings up two very important points in the valuation of tie timber of this class, which might well be discussed and, if possible, settled.

The first has been the subject of considerable argument already in outlying districts; is there any difference between a settler and a logger? If Crown timber becomes of value solely because some settler has decided to give all he has of time and money to make a home for himself and family in an undeveloped region, is the Government to take the returns which he reasonably expected to obtain by the use of his homestead in connection with small logging operations to help him become established? That seems to be the effect of allowing no expense for camps in such an appraisal as this. We sell to the Public, the Public would have to build a camp to market these ties; the settler uses his home; I think the investment in either case should be considered in the valuation.

If the timber were in a well-developed district where several settlers could reach the area from their homes, this argument would not apply; there would be a competitive market, and a Public which in that case could reach the timber without building a camp.

The second point is in the cost of producing Number Three ties. A maker can certainly make a three in less time than a one, but surely not at a cost of 7¢, as compared with 19¢. I suspect these are the prices paid makers by the big operators, and if so, they must certainly discourage the making of number threes. Where there is a difference in value of 30¢ the threes must surely be produced at a loss, and I do not think they should be appraised separately in a one-man show. This appraisal shows a loss of 4¢ per tie, but does not estimate the proportion of grades. I believe the vendor, as well as the purchaser, should absorb part of the loss on threes, and if sale at half price is considered a fair thing the number of ties of each grade must be estimated, in order that the stumpage on the standard ties may allow a margin to absorb the loss on the number threes. The direct costs may be taken as the same for all grades, and the cost of making should be that found by estimating the number of ties per day an average maker could make in the timber under consideration, and allowing him a fair day's wage.

Personally, I would welcome a discussion on the first point, especially. To what extent should we recognize the pioneer in our timber sale policy? We already have the Hand-logger's Licence and the Free Use Permit covering the sale of cordwood.

When we have our timber all managed under regular working plans in Forest Reserves, will we develop a class of settler, on small agricultural areas within the Reserves, with forest privileges similar to the "foresters" born within the Crown Forests of England? Why not, if such privileges will produce a contented and settled settler?

... ...

When I received the circular which shewed a Timber Sale Appraisal of mine, with the last issue of the "Branch" Magazine and saw that it asked for criticisms on the Appraisal I very soon realized that I would have some pretty tall explanations to make.

We all have our own ideas on this subject and after going over the Appraisal found that I could make several of these myself. It will be as well, perhaps, to see what someone has to say before I start in myself.

In regard to the points brought up by Mr. Mulholland I will endeavor to explain the stand I take on them.

(a) Is there any difference between a Logger and a Settler?

A Logger, as I interpret the word, is a man engaged solely in logging.

A settler, such as we have them, in this country, whether he has a Pre-emption or got his Land through the L.S.B. or the S.S.B. wants to spend all the time he can on his place. Only in the Summer months can he do any land clearing that amounts to anything. If he is able to live on the place in the winter he is able to keep a few head of stock, which would be impossible if he had to "work out".

A man working under these conditions can handle Tie timber that the average Contractor or Sub-contractor, building camps, hiring men etc. could not afford to look at. The better tie timber is being largely cut off and we are now selling to these Settlers areas of scattered Lodge Pole that is often limby and scrubby and will not give more than three ties to the tree. The "Tie Hack", unless he were paid at a rate per tie out of all proportion to the value of the product, would not look at such timber.

It is not a case, largely, of being in undeveloped Districts, but the class of timber being sold and the number of ties being taken out in the Operation.

The settler figures he will pay himself fair wages for making and hauling, only paying out for the loading. Anything after that, if he is lucky, will be so much velvet. It is not a case of making any great profit, just living wages and being able, at the same time, to stay at home.

In large bodies of timber he would not figure at all and will not compete, in any way, with the regular Tie Contractor who is in the business.

In this particular Appraisal the Settler is doing all the "making himself, for which I allow .19¢ per tie. He should be able to hew, bunch etc. an average of 25 ties per day, in addition to doing the chores at home. He will pay .10¢ per tie for hauling and .03¢ per tie for loading. This item, amounting to .13¢ per tie will be all the actual money that he will have to pay out. The actual cash, to the average Settler, being a far greater consideration than a larger equivalent in time.

As for the matter of a valuation being put on the buildings etc. of the Settler, that would be a pretty hard matter to arrive at. There may be several small isolated bodies of timber of say 1,000 ties, a winters work, within reaching distance of his place, and which could not be reasonably included in the original Sale as a logging unit.

It is my opinion that this class of Timber Sale is a problem that can only be solved in dealing with each individual case.

An isolated patch of timber that is often surrounded by windfalls, due to an old fire, stands a pretty fair chance of being burnt (I know this is treason) and we are lucky to get it cut, under any circumstances, from a Revenue point of view.

In the case of a Pre-emptor he is already being allowed value for his improvements when applying for a Crown Grant or under the Annual Inspection. Why allow him this value twice?

Ties are looked on, in this District, by the Settlers as their Winter crop.

(b) No. 3 ties were a bone of contention, wherever they were taken out, until the last two seasons. The Contractors refusing to pay anything for them to the Makers. After considerable Missionary work we got the Contractors to pay in the neighborhood of .08¢ for them and the tie hacks were quite satisfied, after giving the rate a trial. It takes very little time to make a No.3 tie, no scoring being necessary and just a thin skelp to hew off. They are easier to handle and after a tree is down and limbed the more ties they could get out of it, the better for them. I have often been told that the average No. 3 can be made well within 10 minutes.

It was an error, on my part, that the percentage of grades was omitted from the Appraisal. Any great loss in No. 3's is partly taken up by the fact of, being lighter, more can be hauled to the load.

No. 3's cut from any area in this vicinity, will average in the neighborhood of 15% of the total. There are always a few

No. 1 & 2 ties, that owing to slight defects, are graded as No.3's and a few No. 3's that slip in as 2's.

In a one man show ties can be put on the cars that a Contractor could not possibly handle owing to the greater cost of production.

In allowing a 20% margin for profit and risk, in Operations of this kind, an actual loss in producing No.3's is more than taken care of.

The taking out of No. 3 ties should be encouraged as much as possible, From the point of utilization of as much timber as possible we would be ahead even if we charged no Stumpage, of any kind on this class of material, and only collected the Royalty.

I do not insist, very rigidly, that every No. 3 on a Sale be cut, but all timber must be cut that will make a good sized 3. The Operators are only supposed to deliver 10% No.3's and it has happened that when a greater number have been delivered than this all No.3 that were close to the specifications were culled.

I can't see, personally, why a Settler, when purchasing Crown Timber shouldn't pay all that it is worth and why they should be in any favored class. The timber is worth so much whoever is purchaser.

A candidate at the recent General Election in England was addressing the constituency :

"Mr. Chairman, Ladies and Gentlemen," he said, "I stand before you as an Englishman, an English Knight, an English gentleman. My family's history is closely entwined with the glorious story of England's Wars." My wife is English. My home is in England. My factory is in England, my employees are English. In short, I am a purely English candidate."

Impressive pause, and a voice from the rear of the Hall :

"Man, man! Hae ye nae ambeeshun at a'"

Victoria, B. C.

Dec. 18, 1923.

"The Editor"

"Root and Branch",

Forest Service, Lands Dept.

Victoria, B. C.

Dear Sir:

I wish to thank you very kindly for the copy of your Magazine which you sent us and also to convey our thanks to Mr. Flumerfelt for his appreciation of our Long Distance Service.

We have always found our work with the Forestry Department has been more of a pleasure than a labor.

Yours truly,

E. TEAGUE,

Toll Chief Operator,

B. C. Telephone Co.

DECISION

(G. P. Melrose)

Decision, according to Colter, is "That profound firmness which enables a man to regard difficulties but as evils to be surmounted, no matter what shape they may assume."

This, I think, is a definition well worth careful thought. It applies to the abstract characteristic of a man that might be called by its synonym - judgment. Decision, however, is a more definite term, it signifies the final word, while judgment does not necessarily imply firmness. A man may have excellent judgment, but lack the decision to carry his judgment to its practical conclusion.

Now, our business is one that calls for an extraordinary amount of decision, of firmness, in our dealings with the public. As custodians and administrators of a natural resource upon which is based much of the Provincial revenue and the productive wealth of British Columbia, we find ourselves daily, and many times daily, in a position where a decision must be made. Judgment must be used in arriving at the decision, but once given, we should be prepared to exercise that "profound firmness" and carry the decision through.

By this I do not mean that we must assume a "bull-headed" attitude and stick, through thick and thin, by a poor decision arrived at through faulty judgment - far from it, but I do mean that, having determined the proper course of action, decision of character must be exercised and that course carried through to a conclusion.

Decision of character, then, is a thing within ourselves. Its outward significance affects other by influencing them to follow the actions prescribed.

As a concrete example, take the timber sale contract. It is based on an examination of the area, from which our judgment tells us that certain methods of operating are proper to be applied. We decide the terms of the contract on that judgment, but do we exercise a "profound firmness" and carry it through? How often, even, do we exercise decision at the commencement of the sale?

Judgment and decision must, of course, be based upon knowledge, and our knowledge of the forest, in a scientific sense, is rudimentary; but we do know certain facts, and rarely, if ever, base sale conditions on anything else. We must, then, be prepared to carry them through.

Where a contract," a meeting of two minds," is contemplated, it is essential that those minds be in entire accord and understanding. The successful conclusion of the methods determined beforehand is dependent upon the understanding of the contract by the lessee. How often do our lessees fully understand all the terms of the contract before signing it, or even before its completion?

This is the point I want finally to make - that we are hampering our decision by not making sure beforehand that the "meeting of the minds" is complete. Before a contract is allotted or signed, there should be a complete understanding of its terms, both by lessor and lessee, and, having that understanding, our "profound firmness," or "decision" of character will have a much easier row to hoe in securing proper operation.

I would suggest, as a regular practice, the careful explanation to intending purchasers of Crown timber and to lessees, of all the conditions of operation, to the end that the plea "I did not understand" be made finally and forever impossible.

... ...

RECORDS

(P. Z. Caverhill)

Month by month new records are being made by the Forest Industries of British Columbia. The success of the fire season just passed has shown a record number of fires extinguished in their inception stages, that is, under 10 acres. The point reached this year was 88 per cent of all the fires controlled before reaching 10 acres. 71 per cent were extinguished without cost. The average cost per fire was $47.50. These latter figures, while not records, are pressing the old figures very close.

The scale, 2½ billion feet, exceeds all previous records of cut by 25 per cent. The Vancouver District alone reached within 100 million feet of the previous record for the Province.

The export of lumber products reaches a new high mark of around 475 million feet. This is over 200 million more than the previous record and ten times the business done five years ago.

The December royalty collections rose to $160,000, a new peak in collecting revenue.

January brings us a new record for stumpage prices. A sale on the North Thompson 16¢ per tie was bid for lodgepole pine. At 32 ties per thousand this works out at $5.12 - a price which puts lodgepole on the basis of one of our most valuable woods and the old bogie about this tree being of no value is apparently exploded thereby.

This I believe is but the beginning. The turn of the tide as it were and the general indications are that the next few years will see the full tide of lumber production centering on the Pacific Coast.

... ...

POTENTIAL WEALTH IN ABANDONED AREAS.

(Ranger G.W.A.Holmgren.)

When reading the report of the Empire Forestry Conference I noticed a resolution dealing with the so-called "shifting cultivation" in the Kenya Colony and elsewhere in the tropics. It struck me that we have in this district (Nelson) and probably in other places in the Province a somewhat similar condition - with the difference, however, that the areas cleared and subsequently abandoned in the Tropics probably will grow other things besides Forest, while the majority of abandoned areas here will not, as the one-time owners found to their cost!

Now, a lot of these areas no doubt have reverted to the Crown for non-payment of taxes. If left to themselves, these clearings will of course in time be covered with forest growth of some description but as the seeds will come from whatever varieties of trees happen to surround them, a great deal of the new growth might consist of less desirable or even undesirable species.

It seems to me, therefore, since these areas are there, and ready to be seeded, it would be decidedly in the public interest for the Forest Branch to take a hand and re-seed them.

If such an arrangement were properly carried out, several advantages would result, viz -

(a) The most desirable varieties would be secured.

(b) The time required to bring these areas under a good stand would be considerably shortened.

(c) The stand would be of uniform age and of the proper density.

(d) As all these tracts are fairly accessible, and have some sort of a road leading to them, valuable data re the growth of the different varieties under different conditions and sites could easily be collected.

I understand from the newspaper that a sum of money has been voted by the Legislature for the carrying out of silviculture in the Province. It is to be hoped that this vote will be a yearly occurrence and will be sufficiently big to allow some of the money to be used for the above purpose. The cost of re-seeding these areas, if taken in hand in time, will be comparatively small, and if some money could be set aside yearly for this purpose I think it would be very well spent indeed.

It goes without saying that these areas should be set aside as Forest Reserves.

... ...

Holmgren brings up a thought and presents it in a new way - the abandoned homestead comparable to "SHIFTING CULTIVATION" There is a similarity, but I believe a distinct difference. Shifting cultivation is an organized and old established method of growing crops and accounts for the cutting down and burning up of forests wholesale; whereas, in the case of pre-emptions the abandonment is due to individual failure and is the cause either of mis-chance or mis-guidance. The subject here, I think, divides itself into two phases, first, the areas already under pre-emption which may revert and, second, the prevention of the extension to further areas.

Holmgren's article appears only to deal with the first. I think the second is a still more important phase and I believe that this can be prevented through proper land classification and the dedication of areas unsuited for farming to timber production.

In dealing with the first phase, namely, those homesteads which have been given up and abandoned, the first point for consideration would be classification. Was the abandonment due to soil or climatic features or to the personal factor? If to the latter then a more industrious person might in the future make a success where his predecessor had failed. If the failure is due to soil or climate then the question of bringing this area back into forests is a matter for consideration. Holmgren has pointed out the disadvantages of waiting for nature to restock and suggests re-seeding. There is a grave question as to whether re-seeding is the cheapest or the best method of reforestation. Tree seed at best is expensive and the wastage has proven high due to birds, rodents, unsuitable seed-bed, etc. Part of this may be overcome, the seed bed may be improved by prepared spots, rodents may be poisoned, but this all adds to the expense. In a comparison between the success of direct seeding and planting in the U. S. Forest Reserves it has been shown that there were 75 percent of failures by direct seeding as compared with 20 percent by planting, or, on the basis of areas restocked, the cost of direct seeding was increased and showed 60 percent higher than planting.

The question arises here as to "Why confine ourselves to consideration of abandoned pre-emptions only which would give us a number of small isolated units. Why not include those burned areas readily accessible where very frequently the seed bed is in even a better condition than where attempted cultivation has induced the growth of grass, reeds and brush?"

Speaking of burned areas brings up what is possibly the greatest deterrent to undertaking any wide scheme of planting or reseeding. In order to be justified in the expenditure of any considerable amount of money in reforestation the forest fire problem must be largely solved and reduced to an insurable amount. This can be done with proper organization and education of the public. New York State has reduced her percentage of burn from 1.6 to 0.17 percent per year in the past few years.

While there are these difficulties in the way this subject is not one that should be sent to the scrap heap; it is only by constantly reviewing and the bringing together of all thought on the subject that we can hope to advance and it is for that reason that we especially welcome these suggestions from field men.

Like Holmgren we sincerely hope that our vote for silvicultural work will become a yearly one and will be materially increased as the importance of the subject becomes recognized. For the first few years these expenditures will likely be made in the collecting of data on results obtained by our present unregulated methods and the collecting of data on which to base future regulations. Close observation concisely recorded and submitted to the Management office by the field men will greatly facilitate this work.

(P.Z.C.)

WHAT DO WE DO IN THE WINTER TIME?

(W. R. Flumerfelt)

Not once, but fully a hundred times since the fall rains finally eliminated all fire danger have I been accosted in this manner: "Well, you fellows are all through for another year" or, "I suppose you fellows have nothing to do now until next summer".

This seems to be the idea of the average person who is not directly connected with the industry, placing us in the category of the hibernating bear.

A few weeks ago, I was asked to give a fifteen minute talk to the Kiwanis Club at Nanaimo, and upon looking over a lot of clippings and copies of different addresses delivered on similar occasions, I was impressed with the absence of any data on the duties of our organization outside of the fighting or controlling of fires, so I used this opportunity to devote the greater part of my paper to an enlightenment on our management, field work, log mark supervision and many other phases of our duties.

This is, I think, a little side-line in the education of the public that deserves mention in any addresses which we may be called upon to give, if only from the viewpoint of justifying our existence when there are no fires to combat, and also our expenditures to quite a degree.

POLICY AND PRACTICE

(F. D. Mulholland)

A year ago I ventured to suggest in your pages that our Forest Policy was not quite so clearly defined and perfectly understood as it might be. My article, however, was misunderstood to mean that we need more policy than practice. Now policy (with a little "p") as applied to the details of management is surely a different thing from Forest Policy (with a capital "P") meaning the decision of the people of this Province as to what the object of management shall be. The details depend on the object. If we wish to get the most out of our forests while the getting is good, we will proceed accordingly; if we wish to establish a permanent industry we will guide ourselves according to that object.

The more clearly the main Policy is understood by our citizens as well as by our Service the better chance we have to accomplish the object desired. The Policy must be clear so that all our practice now with regard to timber sales, land sales, pre-emptions, regulation of logging operations, etc., may be calculated to lead up to and fit in to the systematic management of a regulated forest, if such is our aim. We must have an aim, one wastes ammunition in shooting without a target.

Quoting from the report of the British Empire Forestry Conference held this year in Canada:

> "To secure good results in silviculture, definite objectives, fixity of purpose, and sustained effort are required. In effect, this means that the state must commit itself to a definite forest policy, and having so committed itself be content to leave that part of policy which deals with timber-growing to the expert silviculturist.
>
> Before the silviculturist can practise his work successfully, certain steps dependent on forest policy have therefore to be taken. The procedure has already been successfully worked out in a number of countries, on the following lines, viz:
>
> (1) Classification of forest areas into those which are to remain forest and those which are suitable for other purposes.
>
> (2) Dedication to forestry of those parts which are to remain forest.
>
> (3) Demarcation of the dedicated parts so that they are definite and tangible areas known to all men.
>
> (4) Regulation of the demarcated forests under definite plans of management (working plans)."

The first thing, then, is to decide whether we want to have regulated forests, and, if we do, the next is to bend our

energies towards classification, dedication and demarcation of forest areas. Regulation will come later.

It does not seem to me that the fact that some of our forest land is alienated (mostly temporarily only) should interfere with this process. Private owners have been very definite in the opinion that forestry does not pay, undoubtedly therefore most of this alienated forest land will revert to the Crown when the present crop has been removed.

Silvicultural research can proceed meanwhile, but, as the Conference pointed out, silviculture cannot be practiced successfully until these preliminary steps have been taken. There is every indication that we can obtain satisfactory reproduction of the more productive of our forests by natural means, but much work must be done before we will have sufficient knowledge of the growing stock, the rate of growth, and possibilities of commercial development to enable us to proceed with regulation. Investigations of this nature, therefore, must be carried on without delay in view of the years of work necessary to obtain results.

We already have a great forest industry, it is true; a stranger making periodic visits to our Coast might observe that our great Inlets seem to be passing through stages from a time when they are humming with activity and Union Steamships, to a time when they are deserted save for occasional visits by crews fighting fires in the slash. Will this type of exploitation fill the bill?

If we are to have 30,000,000 people west of the Great Lakes in 75 years, as the Chief prophesies, it is likely that they will consume 25,000,000,000 feet of timber annually. Judging by the present proportion of mature timber as between B.C. and the prairie provinces, two-thirds of this will have to be produced in B.C. We are said to have 150,000 square miles of absolute forest land; this would have to produce an annual increment of about 175 F.B.M. per acre to meet the need, without any allowance for loss by fire, disease or storm. In other words, it would all have to grow an average stand of 17,500 F.B.M. per acre in 100 years. Will we get it?

To put the matter plainly, every one interested in forestry or the prosperity of British Columbia should ask himself:-

DO YOU BELIEVE THAT

The greater part of B.C. is forest land capable of supporting a great Forest Industry?

The production and use of the raw material in the forest for this Industry should be organized on business lines?

The Province maintains a Forest Service for the dual purpose of protecting its Forest from fires and other destructive agencies, and also of managing the business so that the greatest possible permanent Industry may be established and the greatest

possible permanent revenue produced?

It is desirable to secure a sustained yield in many districts, rather than in the Province as a whole, so that the Industry may be stabilized throughout the forested areas of the country, rather than exist in periods of development, full production, decline and death in shifting centres of prosperity?

Young forests are as important as the old, since the mature timber will not last forever, and certain relations of necessity exist between growing stock, increment, and yield?

While the technique best suited to each of our B.C. types may not yet be known thoroughly, the broad principles forming the foundations of Forest Management have been well understood for many years, and our silvicultural problems do not differ in general character from those of other countries?

Forestry can be practiced most efficiently on areas reserved for the purpose, and each area so reserved and brought into a healthy condition is a step toward bringing the whole Provincial forest industry into a healthy condition?

The average B.C. citizen knows little of these things, but is content with the present come-tree-go-tree system of exploitation?

DO YOU KNOW THAT

Many areas suitable for handling as a working circle or unit of administration, belonging to the Crown and ready for reservation, now exist. Some such areas are already exploited or partly exploited and cry aloud for action?

The reservation of many other such areas will depend on the co-operation of the holders of limits within them, and such co-operation is very desirable and necessary?

Much money and time must be spent in classifying our forest areas, ascertaining the stocking, the increment, the rotation, and the best silvicultural system for each Reservation?

IF SO, ARE YOU BEHIND

A Forest Policy which definitely dedicates all Forest Land to forest management in Regulated Forests as soon as may be?

Education of the public in this matter so that they may approve this Policy and the diversion of forest revenue necessary to carry it out?

Personal endeavor by each one of us to bring the facts of the case before the public as represented by those with whom we come in contact?

FOREST AND FORAGE PROTECTION.

(T. P. MacKenzie)

Every discussion relative to forest protection in the west must of necessity include and consider in all needed regulation the control of grazing and its use as a protective agency in the prevention of fire. The practice of western forestry must deal with the close and inseparable grazing use of forested areas, for the forested lands of the west embrace within their limits the summer grazing areas upon which many thousands of head of live-stock are, during the open season of each year, handled out from the established and dependent ranches located all throughout the forests. The forester of the west cannot therefore restrict his operations to the purely silvicultural practice of growing and harvesting trees within the narrow limits of operations required in the care and management of the woodlot or forest free from the problems of grazing control, land law application, mining development and of the many beneficial and retarding factors peculiar to the extensive forested regions of the developing west.

The forage crop is a resource of the forest of as much importance in many localities as is the present and potential timber supply. In such localities the protection of the timber is in part necessary for the protection of the forage resources and in like manner the protection of the forage is essential in the protection of the timber supply, and the protection of both is urgently required to advance the general welfare of the country now and in the future.

In grazing management the forester is in a position to overcome the obstacle of inaccessibility in arranging the use of his annual forage yield often more readily and easily than he can arrange to utilize matured and over matured supplies of timber in remote regions. Range improvements serve him in this in the same way in which his logging roads renders accessible the logging chance. He is, however, especially favoured in the sale of his annual forage yield on the now accessible area in that the yield is consumed on the ground by the allotted live-stock and the driveway there-to need not follow a stated grade but may be located to serve the double purpose of driveway and fireline. Forage utilization under the careful and well-thought-out grazing plan is in itself an insurance against fire of an economic value yet but little considered or understood. The forester whose forest or forest unit is well-stocked with evenly distributed livestock during the "fire season" enjoys a freedom from anxiety which makes for efficiency in the volume and character of his work. Fire is largely a controllable hazard and grazing is an effective means to that end.

THURSTON BAY RANGER MEETING

(C. S. Cowan)

I recently had the very good fortune to attend a portion of the Meeting of the combined Vancouver and Prince Rupert rangers, held at Thurston Bay. Owing to pressure of work at Victoria, and to an unfortunate combination of circumstances, I arrived there just on the last day, but was in time for the "meat" of the whole affair, and that was the Resolutions Committee report, These resolutions will no doubt be published later in detail, and the pleasing feature of the report was the evident care, thought and study that has been given to the Forest Problem in the field. There must have been a good deal more than merely carrying out instructions by the field men. There is a most evident and sincere desire to place Forest Branch work on the highest possible plane, and while possibly I personally do not agree with everything that was said, or with everything that was recommended, I do most heartily agree with the spirit that prompted the resolutions committee in making their different reports.

The climax of the Meeting, which was the annual dinner, put us all in a good humour with ourselves, and I was very pleased to sit at a table overflowing with good things, and with the members of the staff filled with friendship and good spirits.

The most impressive part of any meeting of this sort is to me the very positive proof that our men are not asleep on the job; that they are thinking and thinking hard of how to solve the problems which arise every day, and if a suggestion is not acceptable to the District office, the originator has no cause to worry about it. It may be because one cannot put in a local rule, or perhaps because the "suggester" does not visualize that conditions on the lower coast are not applicable to the conditions exisiting in Cranbrooks or in Kamloops, and it is unfortunately our job to co-ordinate these different suggestions, and we in our turn do the best we can. It may be that Ranger B. thinks that if a certain regulation were put into force it would solve his problem, but on the other hand it might double the problem for Ranger X. It may be that this scheme has been already worked out. It may be any one of a hundred different things, but that your own pet theory at a Ranger Meeting is not put into actual practice is no reason to be discouraged.

This office has been accused at times of writing brutal letters, which is evidently one method of describing the emphasis we have occasionally felt it necessary to place upon certain instructions, but since the meeting, I feel that there is nothing but accord existing between the field and the Victoria office.

After all, it is not the nicest thing to do; to sit in the position of a critic, when men are struggling with field problems in the way that appears best to them but it apparently has to be done.

In conclusion please let me take this opportunity of thanking the Vancouver and Prince Rupert Rangers for their very hospitable treatment of my own ideas along my particular line of work, and I know that as a result of our straight talks, I will be, if possible, a little more receptive to this suggestions.

LORD, let me live like a Regular Man,
With Regular friends and true,
Let me play the game on a regular plan,
And play it that way all through;
Let me win or lose with a regular smile
And niver be known to whime,
For that is a "Regular Fellow's style
And I want to make it mine;

O give me a regular chance in life,
The same as the rest, I pray,
And give me a regular girl for a wife
To help me along the way;
Let us know the lot of humanity,
Its regular woes and joys,
And raise a regular family
Of regular girls and boys;

Let me live to a regular good old age,
With regular snow-white hair,
Having done my labor and earned my wage
And played my game for fair;
And so at last when the people scan
My face on its regular bier,
They'll say, "Well, he was a Regular Man;"
And drop a regular tear.

PERSONAL PARS

T.H. Wilkinson has made a start inspecting the proposed Camp Sites on Vancouver Island. Get your "Ideal Camp-Sites" lined up so that there may be no delay in the game.

The co-operation which exists between Government Departments is exemplified by the action of the Provincial Health Department in making a grant towards the cost of providing sanitary accommodation on the Camp-sites. It is up to you to see that the Department is given value for its money.

The launching of the good ship "FORESTER" is now an accomplished fact, and she is certainly a credit to the staff at Thurston Bay.

The pipe-line at 'the Bay' was hors-de-combat for a few weeks in January, due to the filling of the dam with gravel and a tree's falling across the trestle. The dam was cleared by forcing out the flash boards - a cold job! - and an energetic crew of hand-loggers, headed by Major Andrews, had the pipe-line break fixed in a day, and the Pelton wheel turning over again.

The dinner following the Thurston Bay Meeting was a huge success. A copy of the menu is before us, and we'll say it looks as though a pleasant time was had by all. But------is the full menu shown?

Supervisor H. Smith produced a hose-winder and a hose "unwinder" at the Thurston Bay Conference that are both simple and extremely effective. They originated in the fertile brain of Assistant Ranger Pearson, who is commended for the ideas he has put into concrete form.

The resignations of Rangers Daniell and Dixon, the unfortunate accident which robbed us of the services of Ranger O'Grady, and the fact that Ranger Noot is no longer with us, have created a corresponding number of vacancies in Vancouver's organization. These have been filled by the appointment to the permanent staff of A.J. Mulcahy, R.M. Benson, G.H. Waller, and A.S.Coburn, all of whom have done yeoman service in the past while on the temporary staff. We extend a cordial welcome.

It is with pleasure that, we record the appointment of F.O'Grady to the position of Supervisor's Clerk at VANCOUVER, where his services will be very valuable.

William Black ("Junior") goes to Thurston Bay.

"Jack" Frost, who forsook the pen for the Biltmore stick, it will be remembered, in April 1922, and who has been employed in the interval as an Assistant Ranger, has now been appointed to the permanent Ranger staff. Congratulations, Jack!

In our issue of October, 1922, we intimated that Mr. C.B. Peterson had been elected President of the Victoria Branch of the Civil Service Association. It is with pleasure that we announce his enthusiastic re-election for another term of office.

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OUR BOOK SHELF

A New System of Judging Supervisors and Rangers,
(Supervisors' News Letter. San Francisco, Cal., Jan. #13.)

Forestry and the Logger. E. T. Allen.

Minimum Requirements for Reforestation, P. Z. Caverhill..
(The Timberman - Nov. 1923.)

Western Forestry and Conservation Assoc., General Meeting, 1923.

Fire-Fighting Organization and Equipment. W. D. Humiston.

Fire-Fighting Organization in Logging Camps. G. C. Fry.

Relative Humidity and Forest Fire Prevention. Dr. J.V. Hofmann.

Portable Pumps for Fire-fighting. E. F. Ross.

Fire-fighting Organizations in Logging Camps. C. S. Cowan.
(The Timberman - Nov., 1923.)

High Lead and Reproduction in Pine Stands. E. N. Munns.

Weather Forecasts Aid in Forest Fire Control. H. K. Flint.
(The Timberman. Nov., 1923)

Tailor-made Cigarettes One Great Cause of Fires.
(B.C. Lumberman. January, 1924.)

The Use of Pacific Coast Lumber in Mines.
(West Coast Lumberman, Dec., 1923.)

Construction of Logging Railroad Bridges. Jas. O'Hearn.

Logging Engineering Education. H. Winkenwerder.

Horse Logging in Inland Empire. E. C. MacGregor.

Slack-line Sky-line Systems.

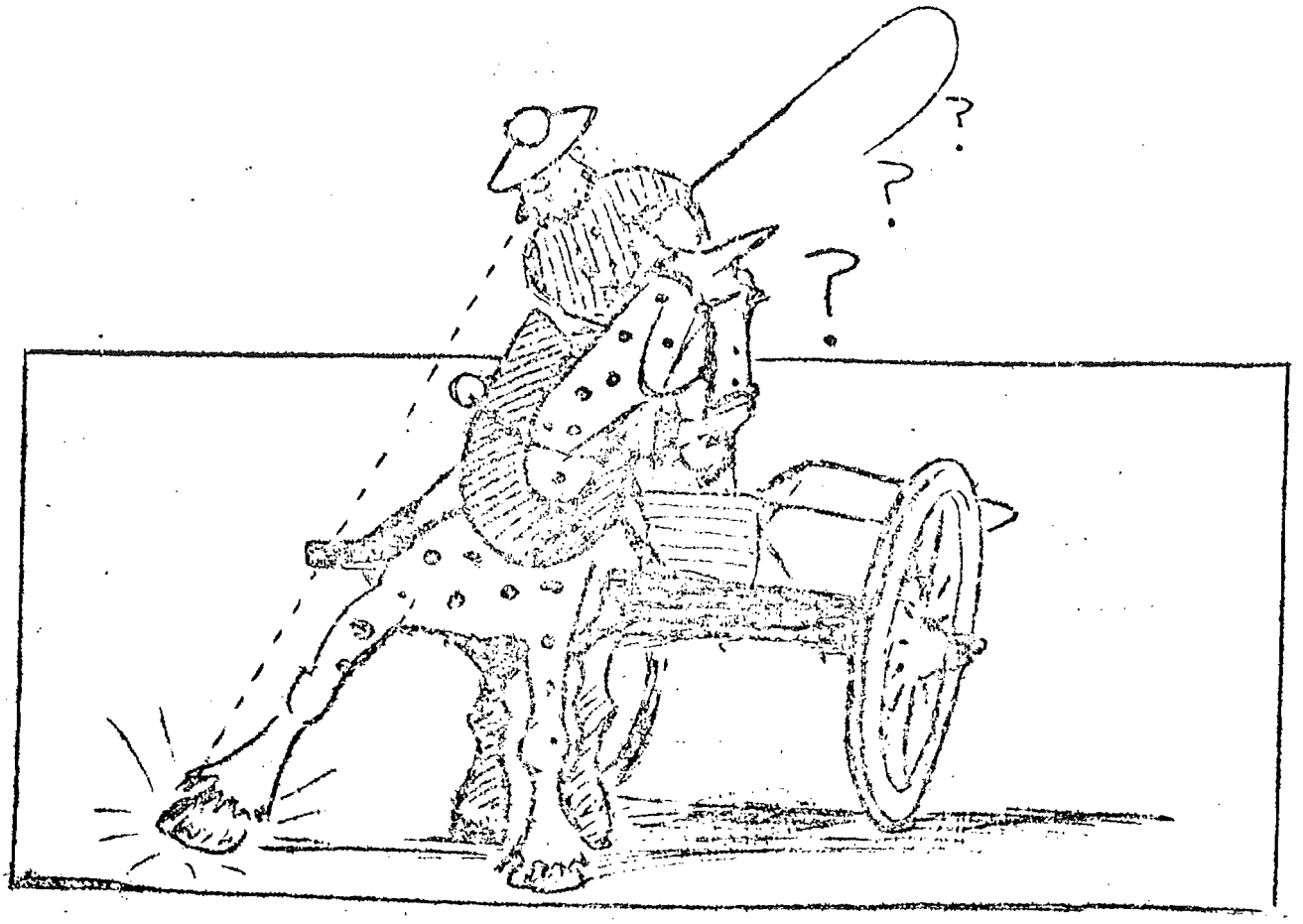
Yarding and Roading Methods.

Construction of Log Flumes. A. H. de Wolf.

Logging Railroad Construction. W. Ryan.

The Pacific Logging Congress, 14th Annual, 1923.
(The Timberman. Nov, 1923.)

A Revelation in Forest Mapping. A. H. Hodgson.
(Journal of Forestry, November, 1923.)



DO ANIMALS THINK ? It happened in Aberdeen. A teamster was driving through one of the suburbs of the city when, for no apparent reason, his horse stopped and refused to proceed. The teamster, having exhausted his vocabulary in a vain attempt to induce the animal to resume his tractive effort, tried a vigorous application of the whip, but equally without result. Frankly puzzled by this strange behaviour he dismounted to investigate, and found that the horse had its off fore-foot firmly planted on a "saxpence."

... ...

AFTERMATH

The following are extracts from three Rangers' diaries, which indicate that Xmas festivities were duly enjoyed:-

"December 25th., Christmas day."
"December 26th., "Ill."

"December 25th., Christmas day."
"December 26th., "Day after Christmas."

"December 25th., Christmas day."
"December 26th., In "port" doing office work."