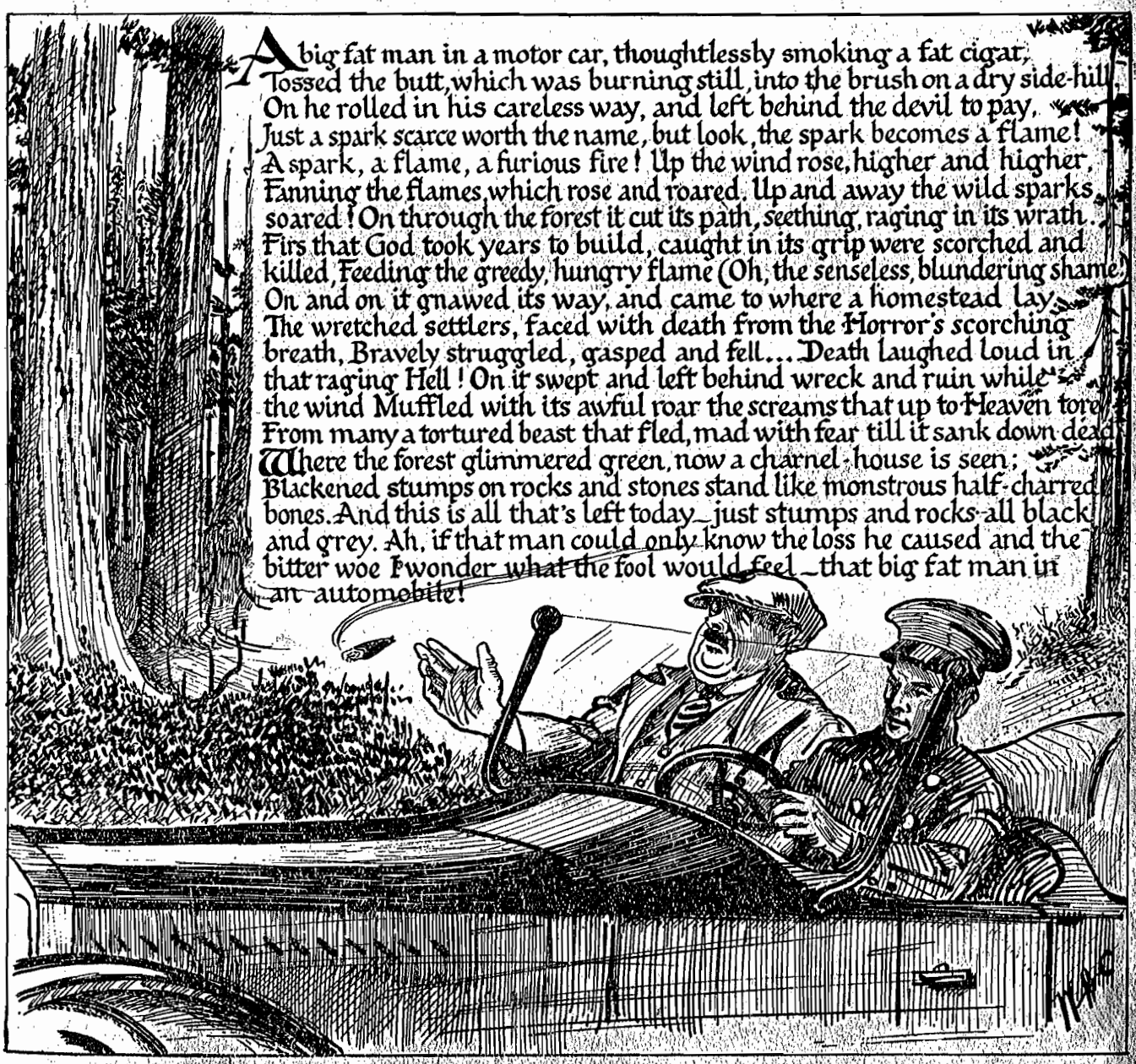
ROOT AND BRANCH

BRITISH COLUMBIA FOREST SERVICE LANDS DEPARTMENT

Vol. I. SEPTEMBER, 1922. No. 5.

A big fat man in a motor car, thoughtlessly smoking a fat cigar,
Tossed the butt, which was burning still, into the brush on a dry side-hill.
On he rolled in his careless way, and left behind the devil to pay.
Just a spark scarce worth the name, but look, the spark becomes a flame!
A spark, a flame, a furious fire! Up the wind rose, higher and higher,
Fanning the flames which rose and roared. Up and away the wild sparks soared! On through the forest it cut its path, seething, raging in its wrath.
Firs that God took years to build, caught in its grip were scorched and killed, Feeding the greedy, hungry flame (Oh, the senseless, blundering shame!)
On and on it gnawed its way, and came to where a homestead lay.
The wretched settlers, faced with death from the Horror's scorching breath, Bravely struggled, gasped and fell... Death laughed loud in that raging Hell! On it swept and left behind wreck and ruin while the wind Muffled with its awful roar the screams that up to Heaven tore
From many a tortured beast that fled, mad with fear till it sank down dead.
Where the forest glimmered green, now a charnel-house is seen;
Blackened stumps on rocks and stones stand like monstrous half-charred bones. And this is all that's left today—just stumps and rocks all black and grey. Ah, if that man could only know the loss he caused and the bitter woe I wonder what the fool would feel—that big fat man in an automobile!



THE GOLDEN RULE

Office hours are over, smoking time is here, and the Editor says that "Root and Branch" needs more fuel in order to keep up steam.

There has been rain during the past twenty-four hours, and a considerable change in the temperature; so much so that a fire has been laid in the grate, and it makes one wonder if the summer is nearly over. At any rate, there was a broad smile on Cowan's face today, and a different kind of worry was bothering him - his brow was puckered over settling claims, instead of fighting fires.

Walking across the Causeway the other day with an acquaintance, he began telling me about his camping experiences and, among other things, said how pleased he was with the treatment he had received from some of our Forest officials.

He mentioned particularly one man whom I will not name, but whom you will all recognise as soon as I give you his description. He said he was a splendid physical specimen, standing over six feet, and reminding the narrator of the war posters of recruiting sergeants. (Now, don't all rush to the mirror to see if the description fits!) But it was not his physical perfection which impressed my friend so much as the courteous manner in which he drew attention to the regulations respecting camp fires.

It was this conversation which made me think that perhaps a few words on Courtesy would not be out of place in "Root and Branch."

Many people seem to think that to be courteous is an indication of weakness, and that strength is denoted by a haughty, overbearing manner. Courtesy is not subserviency, nor does it require meek submission to abuse. The advice of the preacher rather suited me when he said, - "If a man smite thee on the right cheek, turn to him the left also, and then sail in!"; and Shakespeare had the same thought when he said, - "Beware of entrance to a quarrel, but being in't, bear't so thy opponent shall beware of thee."

The courtesy which I more particularly want to mention is not so much the smiling gracious manner, but can perhaps be better expressed as thoughtfulness for other people, and the application of the Golden Rule, - "Do as you would be done by." I can better illustrate my meaning by telling you of something which happened soon after I joined the Lands Department. A letter was brought to me for signature, giving some information to a man on the Queen Charlotte Islands in

answer to a request; the letter finished up by telling the man that for the rest of the information required he would have to address the Comptroller of Water Rights. I did not know who had written the letter, but made inquiries and had him sent in to me (This will not hurt his feelings, for he will never see it - he has left us long ago.) and then I asked him if he knew where the Queen Charlottes were and, if so, did he know that during the winter months they only got a mail once in two weeks?

I pointed out that it might take nearly three weeks before the man received the letter, and he would have to wait another two weeks before he could post one to the Comptroller of Water Rights, and then perhaps not get an answer for another three weeks!

I asked him if he knew the Water Rights Branch was a part of the Department of Lands and, whether it was or not, could he not have copied out the questions and sent them to the party who could answer them and so save the questioner perhaps two months' time?

I asked him what he would think if he sent an order to the T. Eaton Company, for half-a-dozen collars and half-a-dozen silk handkerchiefs and, if the letter happened to be first sent to the Linen Department, they shipped him the collars and told him he would have to apply to the Silk Department for the handkerchiefs!

The writer of that letter did not intend to be discourteous. He simply didn't think. No doubt, if the enquirer had come to the Information Desk in person, he would have answered what he could and then have taken him to the Water Branch, where he could get the rest of the information.

Now, do you see what I am driving at? Try to put yourself in the other fellow's place - it will not only help the other fellow, but it will help you; it will help the Department; it will help the Government.

You cannot win a game of checkers unless you play the other man's game as well as your own.

Courtesy and weakness are not synonymous.

One of the traits of a <u>gentle</u> man is strength.

-: Geo. R. Naden :-

****

Courtesy engenders good will, so let us be courteous.

INSPECTION

It was about the time of Baron Byng's visit to our city that the subject of Inspections cropped up, and Currie was entertaining me with some instances from the Front. Currie was a driver in the Field Artillery at the time, and a driver's main mission in life, it appears, was to keep his team, his harness and himself in good shape. Inspections were frequent, and at a General Inspection, after a particularly strenuous cleaning-up (and after the Battery had been kept waiting around for the C.R.A. for upwards of an hour in a downpour), Currie got h--l because some Brasso was found on the underside of a buckle. I remarked that it must have been intensely galling for a man who went over to do something, to be checked up in such petty ways, but he said - "Why no - not after one got it into one's head what it was all for, and the real object back of it. And to get thoroughly cleaned up had a wonderful effect on the morale of the troops, especially after a hard spell in the forward area."

There you have the idea of inspection, and we all need it. We all get it, too, from the Minister down; and the final inspectors are the people. The findings are crystallised in public opinion.

Now, are we putting the work across so as to meet the general approval of the public?

A few days ago I was making a field trip and found a Ranger in difficulties with many of the people in his district. I made some particular enquiries as to the reason. One instance will be sufficient to illustrate.

He was having trouble in securing the co-operation of the local Telephone Company and particularly with his local operator. The local office was open officially until 8.00 p.m., but after that through courtesy only. The ranger had occasion to use the phone after hours and as there was no sympathetic understanding between the ranger and the operator, the latter complained to his Superintendent. The superintendent wrote to the ranger, explaining that after 8.00 p.m. the office was open through courtesy only, for calls for the Doctor or Police, but that undoubtedly he could arrange for emergency fire calls. The ranger's reply is illuminating. He states - "I challenge..... to cite a single instance of my using the telephone between these hours except for urgent business in connection with fires..... Your letter on this subject has apparently been misunderstood by Mr.....for this very evening at 10.15, after I had been ringing for a quarter of an hour, he refused to connect me. I am requesting the District Forester to take up this matter with you and obtain co-operation of service." On checking up this ranger's phone calls that evening, we found that he had connections at 7.30, 7.35, 8.00, 8.10, 8.15, 8.45, 9.30, and tried again at 10.30, which was refused.

Now the point of the above is that this ranger is not in sympa thy with the people. He is not putting himself in their position. His letter would tend to show that he wants to be all-powerful, to use the big club where he should solicit. The telephone operator was quite within his rights, and he too has certain privileges. I have no doubt that had the ranger shown him the need for these calls, he would have been quite willing to make the connection; but the belligerent attitude shown in the letter which I have quoted, and the resort to compulsion where a sympathetic request was required, leaves very little doubt as to the cause of the other complaints from the ranger's district.

We should remember, all of us, that the telephone operator, the rancher, the lumber-jack and the prospector form a part of the public opinion which is the final inspector and judge of our work.

-P.Z. Caverhill.

==========

BRANCHING OUT - You will observe that this month we have secured the co-operation of the Surveys Branch in the person of the Surveyor-General, and of the Water Rights Branch as represented by their Electrical Engineer, Mr. Geoffrey Porter Mr. Henry Cathcart, Superintendent of Lands, has also promised to take his place amongst us in an early issue. We have been able to induce these gentlemen to promise us a series of articles which we are sure will be of great interest to the staff as indicating something of the work of the other Branches of the Department of which we form a part. They will show us, too, just where the Forest Branch can assist them and they can assist us, since they - with us - have one end in view, to make this the most efficient Department in the Government service.

==========

IN MEMOrIAM.

We have just been notified that Major McLaurin of the Dominion Air Board, was drowned this afternoon (Sept. 11th) when the plane of which he was in charge was wrecked off Point Grey.

We mourn his loss as that of a member of our most intimate circle. Major McLaurin was associated with us for a comparatively short time, but long enough for us to discover in him those sterling qualities which make a man welcome among men.

He was a brave officer, a skilled and fearless aviator, a very gallant and courteous gentleman, and we count it a privilege to have known him.

DREAMS

Having just returned from a visit to the Prince Rupert district, I speak with assurance when I say that the beds on the palatial launches "EUCLATAW" and "LEILA R" are about the best cure for insomnia that could be devised (or perhaps the hikes those Northern rangers take us on have something to do with it).. It is not strange, therefore, that when I returned to my comparatively hard couch at home, I found it difficult at first to fall into my usual dreamless slumber - after having been accustomed to get my night's sleep for a week or more on those extremely soft, downy luxuriant beds above mentioned.

At last, having attained a more or less troubled sleep, I was visited by a dream; a dream which might almost be classified as a nightmare!

It has been said that dreams are but the wanderings of one's subconscious mind, and that our mental reactions to imaginary situations created during one's dreams are much more truthful indications of our real feelings than are our actual, wide-awake mental impulses.

Anyhow, it seemed that I had returned to the office. The Chief called me into his office and (although I can't remember the exact conversation) I can clearly recall the look of sorrow and hopelessness which had taken the place of his usual one of cheerful equanimity. Probably what he said was - "Well, St.Clair, ROOT AND BRANCH has gone bust" - or words to that effect - and probably I asked him "How come?" And he said - "Well, I was away, you were away, and Cowan and Melrose and everybody, and apparently nobody cared a whoop whether we got out a paper or not, and nobody has written anything, and we haven't received anything from the field, so I guess there's no use our trying to get out the paper anymore. Apparently the men don't want it and so I guess we'll drop it. It was a nice idea but it didn't work."

Have you ever dreamt of a death in the family, or (if you are Scotch) of having lost your pocket-book? Then you'll know that sort of gone feeling in the pit of one's stomach that I had when I heard of the death of our "infant" from starvation! I certainly felt bad. And so when I got to the office, and found that everyone had written something this month, that contributions were really coming in from the field, and that things never looked brighter for ROOT AND BRANCH, probably you will wonder that I didn't pull off an old-fashioned celebration.

Well, perhaps there is something in this sub-conscious business after all. I think we would all feel badly if R.A.B. didn't make good, and we all like to see our paper each month. So let's swamp this Editor chap with contributions from now on.

-: R. C. St.Clair :-

NOW IT CAN BE TOLD.

Most of you know that the above is the title of a book by Sir Phillip Gibbs. One of the things that struck me about this book was the title, which seemed to breathe a huge sigh of relief that all the author had wanted to say for so long, at a time when the saying would probably have been much more valuable, could now be said, and the mistakes of other people shown up in the light of day.

The onlooker always sees most of the game, and so Sir Phillip knew the tactics which should have been pursued - but were not. Needless to say, this is in reference to one of the latter wars - 1914 - 18. But perhaps, through all the criticism, there are a few lessons to be learnt; and he would be foolish indeed who did not admit that there is room for improvement in any policy that is pursued.

We have just finished our war of the 1922 Fire Season, and I am now inviting criticism - asking you to wield a pen instead of a mattock.

Such planning as is possible must be done with pen and paper; the form of organization to be built up is thought out within the walls of an office; the budget and distribution of allotments causes heads to be bowed over desks. But when the fire season breaks, one has to watch the planning that has been done take form and succeed or collapse. I know that there has not been a collapse, but I know also that complete success is more than we expected - or got!

Wherein did we fail? The general public, judging from the reports that are now beginning to stream in, are apathetic in regard to Forest fires; but though the education of the public is one of the big things we must undertake (for we cannot advance faster than public opinion) I want to find out how we can stop the leaks in, our organization; how we can take advantage of our past errors.

Send some of the suggestions that you have been 'gointa' for a long time past, so that action may be taken before the year is out.

The 1922 Season is over, and if we have made mistakes now is the time "it can be told."

-- C. S. Cowan --

"I hear they've gone dry in the village where your brother lives, Sandy." "DRY! Man, they've gone parched. Ah've juist had a letter frae Tam, and the postage stamp was stuck on wi' a pin!"

MAKING USE OF OUR PUBLICATIONS

I have just been reading some of the articles in the last number of the Journal of Forestry, and the thought suddenly struck me that we seem to be losing, or rather, neglecting to use, a great deal of really practical information contained in that publication.

We find in the Journal articles on every subject from ecology to timber physics, from philosophy to scaling, and yet I doubt very much if a fraction of one percent of the excellent ideas contained in them are followed up by any of us and either tested out as to local application, or put to practical use.

Sometimes we want a bit of definite information on a tree species, or a check on a method of volume table compilation and someone remembers vaguely that "so and so" wrote something on it in the "Journal." Then, after a wearying search, the article is found and probably some use made of it. But the majority of the very practical and use-able articles are lost and gone forever.

In the May number of the "Journal" to which I have referred, there are several excellent articles from which we might gain some useful information that should easily be put to practical use and tests. For instance, take Krauch's "The Intolerance of Western Yellow Pine regarded as a Regulating factor in the Maintenance of the Type." The title sounds formidable, but the short article following it is full of meat. Have you men in the Yellow Pine Districts thought along Krauch's lines, and have you any suggestions to make as to their local application or the truth of his assertions? Does he not suggest in his article certain facts that may be fundamental to any system of Management in the Yellow Pine Types? And is it not time that we should get down to cases on this rapidly lessening type and figure what is to be done along regenerative lines?

Then S. B. Show has an extremely interesting article on "Some Relations between Quality of Site and Quality of Mature Timber - Western Yellow Pine." Are there not some useful suggestions there, both for the Yellow Pine Types and for other types and species as well? Can we not get something more of <u>quality</u> appraisals into our timber sale reports?

I call to mind an article by Berry, I think, on the relation between log and lumber grades some little time back. In conjunction with Show's, it should prove of still greater interest.

And so it goes. Every other article has some very practical slant. They should be applicable to us, and we are not making use of them. Let's get some thought placed there and see if concrete results will not materialise in short order. Let ROOT AND BRANCH "tell the world" as well as the rest of us, how these things strike you and your conditions. Only by such discussion will we arrive at definite and applicable results.

G.P. Melrose.

A TALE OF TWO "LIZZIES"

Mr. Grainger visited our city last week and, in order to facilitate his operations among the local mill-men hired a "Drive Yourself" Ford at the Auto Livery. He put in a busy morning and towards lunch-time hove to in front of the Bank to transact some business. Presently he emerged and strode briskly towards his parking place. Now, where the -- ah, yes, there she was; and Mr. G. climbed aboard, coiled himself down and produced his key. But it did not enter with its usual smooth celerity - nor would it, in spite of his vigorous jabs. Fifteen minutes later, Mr. Pope (of the Water Rights Branch) dropped by on his way to lunch and found Mr. Grainger, perspiring freely, dusty and dishevelled, still actively engaged with his key. Ribald boys and waggish passers-by had failed to ruffle him, but that key was certainly wearing him down! He heartened up at sight of Pope. "Ah, howdedo, Pope. Delightful weather, isn't it. Oddest thing, d'ye know I simply can't get this key to operate. Been trying for quite fifteen minutes too. What? Oh, yes; it's the only key I've got." Just then, Melrose happened along. "Ah, here's Melrose. That's bully. Howdedo, Melrose. Lovely morning, don't you think? so mild. Er - can you induce this key to function? What? Wrong key? Oh, no, positively no; it's the only key I've got; besides, I've started the car with it six times this morning. Yes, perhaps I had better call the garage." He called the garage. "The car number? One-o-two-three-seven. Yes. Oh, quite. But, my dear chap, I hired the car from you this morning. You say you have no car of that number. Really! Well, now" ---------- Yes, that was it. On closer investigation, Mr. G. found his car a little further down the block.

Beggar - "Please, give a poor old blind man a dime."
Beggee - "Why, you can see out of one eye!"
Beggar - "Well, then, give me a nickel."

ROOTING FOR ANOTHER BRANCH

I do not know who christened the "infant" Root and Branch, or what was in his mind when the rite was being performed. I do not imagine, however, that his mental screen portrayed a decrepit old relic of the forest with but one remaining knarled and drooping branch, nor did it show an ambitious little sapling with but one tender shoot worthy of the name of Branch. Rather do I imagine he was picturing to himself a vigorous healthy monarch of the sylvan tribe, with every cell functioning, clourishing on the kindness of Dame nature while repelling all her unkind attacks with unconcern, and comprising within his well ordained system, many roots and branches.

This leads me to my subject which might be translated into the vernacular - "There are others". This may possibly appear a little vainglorious, but that is not the attitude which prompts my compliance with the request with which I have been honoured to convey through the medium of this admirable publication a message from the Survey Branch to the personnel of the Forest Branch. On the other hand, legitimate pride in one's work, associates and traditions, is an admirable thing and necessary in some degree to achieve success both individually and collectively. The writer recently returned from a trip through the Central Interior of the Province, during which he came in contact with a number of Forest Branch officials working under very trying conditions, with fires burning everywhere, and new ones starting daily. No one acquainted with conditions could have anything but praise for these men, for the zeal and determination shown in their work. The Forest Branch may justly feel proud of them.

Turning to the history of this Department, our metaphorical tree, we find that it originally came into being as a twin, the Lands and Works Department; while yet in this form the first branch, the Survey Branch, sprouted. When the twin trunk separated and the Department of Public Works was formed, the Survey Branch naturally remained as a branch of the Lands Department.

We in the Survey Branch pride ourselves therefore as being connected with an institution dating from Crown Colony days, and we have the tradition of such men as Pemberton, Pearse, Trutch, Farwell, Kains, Gore, McKay, and Dawson to look back to for inspiration. All of them have left glowing pages in the history of the Province. Although the oldest Branch, we do not think that its vitality is waning. Every cell is still functioning, and we think that on the contrary today we are doing better field work, receiving better returns, giving more systematic and

efficient service in the office, and producing better maps than ever before.

If, however, we were content with this, the Branch would soon droop. We know that there is room for improvement all down the line, and our aim is to raise the standard of our work to the highest point compatible with conditions, and to build up a service, if possible, more creditable than the past and to be duly respected by our successors.

It is recognized, however, that the Branch, like all other branches, cannot flourish by itself along; it must have the co-operative functioning of the other branches, the main trunk, and the roots. Whereas we endeavour to furnish accurate information from our records to all the interested parties, including also the various Branches of the Department, we look to the other Branches to assist us when possible by supplying information obtained by them. This is particularly applicable to our mapping work. There are many ways, too numerous to mention here, in which the Branches can co-operate, both in field operations and office work; and special articles on details of possible inter-branch co-operation might be valuable material for this publication.

Let us not forget that we are all members of one service, serving one common master, the people of British Columbia, who have a right to expect not only esprit de corps among our various groups, but a spirit which will bring us all, as far as may be humanly possible, into a harmoniously ordained system comparable with that King of British Columbia trees, the Douglas Fir, every root and branch of which keeps on through the ages functioning with that one end in view - a perfect tree.

So if trees can speak, and the leaves whisper - let that whisper be - "Co-operate".

J.E.Umbach,
Surveyor General.

A new use for the yellow cypress of B.C. has been discovered as a result of experiments carried out by the Forest Products Laboratory. It has been found through long research that the yellow cypress is very valuable in the manufacture of storage batteries, different portions of which are separated by a thin layer of wood. B.C. yellow cypress is now being used commercially for this purpose.

PULP, PAPER AND POWER.

Wood is, at the present time, the raw material most used in the paper-pulp industry; consequently, the manufacture of wood pulps possesses the greatest interest from a technical and industrial point of view.

Wood is converted by two distinct classes of operations into pulp suitable for the manufacture of paper. The lower class covers the "mechanical" methods such as grinding wood into ground wood, while the higher class covers the "chemical or cellulose" pulp. This last class produces pulp known as the sulphite, soda, sulphate and kraft process pulp.

From the "log pond" containing chiefly hemlock with a fair amount of spruce and a sprinkling of fir and cedar, the logs are carried to the sawmill. Here they are cut to a uniform length and delivered to the wood room.

On arrival at the wood room machinery is provided to remove all bark, very detrimental to the production of No.1 Pulp, and all knots by drilling or by axe. The wood, now clear and free from imperfections is fed to the "Chipper Machine" which chips the wood at a rate of from 8 to 13 cords per hour if sufficient attention and sufficient driving power are given to the machine. It is imperative that the machines are run at perfect balance, and the blades kept sharp to slice off the chips without bruising for bruised chips are impervious to the digesting process to follow. About 150 horse-power is required to drive a standard chipper.

The chips now pass through a machine known as the "crusher". This machine is for disintegrating the chips into specified weights and thicknesses and removing coarse chips and knots. Having been passed by this machine they go to the screens where large chips, smaller knots and sawdust are removed. These large chips and knots are returned to a machine called the "re-chipper". Leaving this, they are passed through the "shaker screens" where the knots and short slivers are discharged. Knots are useless for pulp.

The selected chips now travel to the "chip bins" consisting of large steel plate storage bins, the bottoms of which are wedge shaped to permit the chips to flow freely from the opening. The chip bins are located just above the Digesters.

Digesting is the important factor in the sulphite process which is today the most important method of making chemical wood pulp. Tilghman's original patent for a digester was taken out in 1867, but it was not perfected until a considerably later date, that is, until the sulphite process became a real working process. His patent consisted of treating vegetable substances with sulphurous acids in water.

The typical form of digester used in the sulphite process today is a tall cylindrical vessel of steel plate.

After the chips have entered the digester, there are several methods of "cooking". The "cook" varies in every mill depending on the materials used. During the cooking operation samples of the cooking liquor are drawn and a frequent check kept on its strength by noting its odors.

When the "cook" is finished it is blown by steam into the blow-pit - a pit arranged to receive the stock blown from the digesters, and, at this point, it is washed thoroughly free from acids.

The stock after leaving the blow-pit is forced against a centrifugal screen plate, and by means of centrifugal force the good stock passes through. The usual type of centrifugal screen runs at about 400 R.P.M. and consumes approximately 35 horse-power.

The good pulp from the screens gravitates into the wet machines which form it into laps, i.e. layers like thick blotting paper, to be passed directly into the "beaters", where the manufacture of paper starts as distinct from the making of pulp. Frequently the sulphite mill is making much more pulp than can at that time be used in the paper mill and a quantity of the laps are stored. Every paper mill must carry pulp storage, and laps are the most convenient form in which to store pulp. So far as is known, laps do not deteriorate with storage.

The function of the acid plant is to manufacture the solution used to digest the chips in the digester.

Sulphur, when burned, unites with the oxygen of the air to form sulphur-dioxide (SO_2) a gas readily soluble in air. In burning sulphur for the manufacture of sulphite pulp, every precaution is taken to prevent the formation of sulphuric acid.

The soda process is much older than the sulphite process and is, of itself, simpler. This process is necessary for certain varieties of paper and utilizes many kinds of woods that cannot profitably be dealt with by the sulphite process, namely, poplar, cedar, pine, cottonwood, etc. It is not necessary to prepare the woods so carefully for the soda process as for the manufacture of sulphite pulp. No attempts are made to eliminate knots or decayed wood. The pulp after digestion is of a gray brown colour, which it retains until after bleaching. Soda pulp, unbleached, is used chiefly for wrapping papers, and for good book and writing papers when bleached.

Ground wood pulp constitutes the lowest class of pulp because of its inferior strength, length and stiffness of its fibre. A percentage of chemical pulp has to be mixed with it to form a pulp suitable for the manufacture of paper. Making ground wood pulp is purely a mechanical process, - the essential feature being the placing of cut lumber under immense pressure against the surface of a revolving dressed stone. Ground wood mills are usually located where there is plenty of available water power. Most newsprint is made entirely of ground wood, with about twenty percent of sulphite added to give it strength and elasticity.

- G. Porter. -

.....

(The next article will be "Pulp to Paper", and the cover will be of Kraft paper made from the "sulphate process", and the article will be printed upon the paper called Newsprint, made from ground wood and sulphite pulp. - Editor.)

INITIATIVE. The world bestows its big prizes, both in money and honours, for but one thing. And that thing is Initiative. What is Initiative? I'll tell you: It is doing the right thing without being told. But next to doing the thing without being told, is to do it when you are told once. Next, there are those who never do a thing until they are told twice; such get no honours and small pay. Next, there are those who do the right thing only when Necessity kicks them from behind, and these get indifference instead of honours, and a pittance for pay. This kind spends most of its time polishing a bench with a hard-luck story. Then, still lower down in the scale, we have the fellow who will not do the right thing even when someone goes a long way to show him how and stays to see that he does it; he is always out of a job, and receives the contempt he deserves, unless he happens to have a rich Pa, in which case Destiny patiently awaits around the corner with a stuffed club. To which class do you belong?

- Elbert Hubbard -

FIELD TRIPS

During the latter part of July and August I had the opportunity of visiting the cruising parties on the Nass River, Prince Rupert District, and spent a very interesting two weeks there.

Arriving at Prince Rupert on July 26th, I found the "fire-proof" district in the grip of the worst season in history, with the District Forester and staff at last getting some experience of what the rest of us have had since the time we joined the Service. No longer can we smile politely when anyone speaks of fires in connection with Prince Rupert.

Public apathy seems to be the main trouble in the Northern Districts, and as a result it is difficult to secure any effective co-operation. As witnessing part of Mr. Manning's strenuous days, I may say that he had 15 prosecutions in 10 days, and secured convictions in all cases.

From Rupert the launch "Leila R." took me to Mill Bay, a cannery village at the mouth of the Nass. Here I had a good chance to watch the process of canning salmon. The catch this year was very heavy and conditions excellent for seeing just how it was put up. Contrary to expectations, I was not sickened of eating canned salmon, but rather impressed with the cleanliness of everything about the place.

At Mill Bay I hired a Siwash with a motor boat to take me up the Nass. This proved to be the most tiresome part of the trip, as we were over nine hours making a distance of about forty miles up stream. However, I finally landed at Clarke's camp at midnight, rolled out my blankets and forgot everything till the hateful whine of the mosquitoes brought me to life.

An interesting sight near this camp is the great lava bed, the outpouring of a crater located on the Tseax River. The lava has not yet become weathered or tree covered, and lies in great flat slabs just as it cooled. Elsewhere it has cracked and sunken in great dips and holes, just like ice when the water lowers underneath, and large areas are just heap after heap of clinkers, such as we rake out of the furnace on cold winter nights.

From Clarke's camp I went to Aiyansh, the center of a fertile valley that one day will doubtless be a thriving agricultural community, and then found that, when I left Victoria, I had not left all fires behind. There was a nice lively little 100-acre blaze right in my path of duty. Two days on this, with the able work of the settlers and our cruising parties, put it in apple-pie-order, and I went on to Orchard's cruising camp.

This is the main Nass party, with three cruising crews at work, draftsman, cook, packer and trail cutters. The work is the usual 5% cruise of a large area of surveyed vacant Crown lands lying to the East of the Nass River, between the Tseax and Cranberry Rivers. The bulk of the timber is Hemlock, somewhat scrubby, but usually sound. Spruce, Balsam, Cedar and Cottonwood form varying proportions of the stand. In some localities the stand runs to 80 M. per acre, while in others it won't run 1000 board feet.

Orchard has been getting out some interesting figures on cruising costs, checks and distribution of labor. In connection with the latter, he has found that out of his total crew time only 28% is actually spent on cruising. In other words, out of 100 man days, considering the whole party, only 28 are actually spent running strips. The balance is made up of packing, cutting trail, checking, moving, etc. Such figures as these are subject for some hard thinking, as 28% seems a pretty small proportion of the work to be actually spent on strip. Even at that the work is costing less than 12¢ per acre.

After a strenuous week with Orchard, I returned down the Nass by the same means as I went up, reaching Rupert on August 10th and Victoria on August 13th.

This trip has left with me a fine impression of the timber possibilities in the Nass Valley. Undoubtedly that vicinity will see lots of development, both along timber and agricultural lines. It is also interesting to note that the Nass rises in the famous Groundhog coal region and is the most likely route for a railway tapping that wealthy section.

Around Aiyansh I found one settler raising and ripening tobacco, sweet corn and tomatoes, which is going some for so far North.

Cruising conditions on the Nass might be characterized somewhat by the following incident that occurred on line. Of course we don't vouch for the accuracy of it, but here is how they told it!

Cruiser to Compassman: "How many logs in that hemlock, Bill?"
Compassman: "That isn't a hemlock, it's a devil-club."
Cruiser: "Well, what do you know about that! I've been tallying those for the last twenty chains."

-: Geo. P. Melrose :-

FIELD NOTES

A most interesting letter is to hand from Vancouver. Lack of space forbids us to quote it in extenso, which is unfortunate, as we have a difficulty in deciding what to quote and what to omit from a letter which is so entirely readable.

"Since the end of June every member of the field staff has been pretty busy in connection with the fire situation. Practically no rain fell in this district between May 26th and August 9th. During the first part of this period the situation was held in check with comparative ease, as it is not unusual to have quite a number of fires at the end of May and we were well prepared. This year, however, the usual June rains did not materialize, with the result that from about the 20th of June until the first week in August fires started daily in dozens and the organization was soon taxed to its utmost. During July we were literally fighting with our backs to the wall. The rains which fell on August 9th and on subsequent days improved the situation greatly so far as actual fire suppression was concerned, but the aftermath of fire accounts and reports on over seven hundred fires has kept us, and is still keeping us, exceedingly busy."

"One of the bright spots of the present season, on the Coast, has been the usefulness and adaptability of the airplane to Forest Protection in this district. During 1921 airplanes proved their worth for fire detection, and for rapid transportation, beyond any doubt; but this was under normal weather conditions when visibility and flying conditions were good. This year the planes (under the able supervision of Major McLaurin) operated continuously throughout the season, often when visibility conditions could hardly be worse. For general supervision they have proved simply invaluable, and they have also proved to be of real practical value for transporting fire-fighters and equipment. One incident alone which deserves mention was the transporting of a crew of ten men, equipped with portable fire-fighting pump, hose, ordinary fire-fighting tools, camp equipment and a week's supply of food into Buttle Lake, in the centre of Vancouver Island, on one trip. As a result of our being able to employ a plane to transport the fire-fighters to this fire, we were able to get it under control and extinguished before it had covered more than three acres. Using ordinary means of transportation, it would have taken several days to get the crew in and established."

****

Writing in his usual happy vein, District Forester MacDonald, Nelson, recounts a back-packing trip which he and Mr. L. S. Hope made some weeks ago.

"We planned on making the trip of 65 miles in about ten days. At the end of the second day we had made about ten miles, and the remaining distance looked most discouraging, especially while our tender shoulders were aching from association with packboards. It is fortunate that we did not get away as early as we intended (say two weeks earlier) while the rivers were high. While planning the trip the map of the district was carefully scanned and a trail is shown following the west bank of the river the whole distance. The first time we lost the trail, so great was our faith in departmental information as crystallized on maps that we hunted perhaps for an hour before considering the possibility of the trail's crossing the river. It did, however; and nine other times on that and the following day we forded the Kettle River. Thirty-five miles south from Kettle Bar extends a gravel bench Jack-pine country that is useful only for grazing purposes. There is no agricultural land and no merchantable timber - nothing but small Jack-pine and limby Spruce. The whole area has been fairly free from fires for several years, although there is evidence of extensive fires, say ten or more years ago. Only two recent burns were observed, and neither of these were large.

"Both Mr. Hope and myself are excellent cooks - that is, tea cooks. Our bannocks were splendid - mostly as ballast for the packs to keep our feet from slipping - until we arrived at the first farm house in Christian Valley where I purchased two loaves of the most delicious bread I have ever eaten. Contrast may account for that, partly.

"Hope stayed behind at one ford and took a snapshot of me in midstream. I would send you one, but I am afraid you might mistake it for a picture of a squaw with a papoose on her back. Hope calls it 'Washington crossing the Delaware' and I am so pleased with the delicately-veiled compliment that I have labelled my copy so. It is the only time I have been compared with a great man, either in appearance or achievements."

****

We are taught to believe that Heaven will reward us for our good work here below, but it would be discouraging if we had to go there to collect! Gen. C. A. Blacklock, of the Kitsumkallum Timber Co., (in the Prince Rupert District) thinks we should have a little on account. Writing to District Forester Manning, he says - "Hope to be in Rupert on my return from Kallum Lake, to thank your Department personally for the effecient manner in which they tackled the difficult fire situation this year."

The Kitsumkallum Timber Co. are the main licence holders in the vicinity of Terrace.

"Looking at the general situation from a mechanical point of view," writes Inspector J. H. Blake, "our equipment has given us wonderful results when we take into consideration the difficulties under which it has been operated. Our Forest fire pumps have done yeoman service, some of them having run for periods of two and three hundred hours at a stretch. In checking over some repair bills for 'Wonder' pumps in the Vancouver office the other day I was gratified to find that, for twenty pumps repaired, the average cost was under $20.00. This does not refer to all pumps, however, as in some cases owing to negligence or carelessness of the operator, we have had pumps completely wrecked. A pump should be treated as a human being, or at least like an automobile. A chance and a little justice are all that are required.

"One hundred dollars per month is far too high a repair cost on a car but this has occurred for two month in succession on the same car. An investigation is proceeding, and it will take some tall explaining even if there has been an accident. Nevertheless, there are bright spots in the "pay, pay, pay" aspect. Another car which I have in mind has only cost $10.60 (outside of tires, of course) from the 1st of April to the end of August. This is a second year car and, moreover, is in good mechanical condition. Now, don't say that his roads are better than the roads in some other district. They're not; I've been over them and his mileage isn't the lowest in the Vancouver district by a long shot.

"Our launches are operating normally and the only outstanding feature lately has been a new engine for the "Western Hemlock." This necessity arose in the midst of the fire season, and Thurston Bay rose to the occasion and installed it, and had the launch in commission three days after the engine was delivered there. The new boats "Cherry" and "Balsam" are both giving good service and are proving a credit to both the builders and the engine-makers. The new standard Ranger launch "Cottonwood" is now nearing completion and will be in service before the end of the month (Sept.)

"Permit me to ask all operators of mechanical equipment to put forth even greater effort toward the lessening of the costs of operation and maintenance. Our equipment has had a hard year and of necessity we must pay the piper; but it lies almost entirely in the hands of the operator as to how much we will have to pay. Is it not better in every way to proceed steadily in a given direction than to race halfway, break down, and perhaps not get there at all?"

THE ADVANTAGES OF THRIFT - "If a man had put one hundred dollars in a savings bank twenty years ago," said a statistician after dinner, "it would amount to over two hundred dollars now - and he could buy as much for it now as he could have got for the original hundred at the time he began to save."

WHAT DID WE MEAN? - The Surveyor-General advances one theory in regard to our choice of a title for this magazine. Asst. Ranger Harrison (Nelson) has another. - "We were progressing about six miles per hour in the F. B. car. Roots alternated with chuck-holes interminably. There were long attenuated roots that spanned the larger holes and added to the general roughness by making two holes where only one existed before. There were sinuous, crooked, gnarled, twisted, broken, erratic roots which each contributed its own particular variation to the work imposed on the shock-absorbers and to the demands on the agility of the occupants of the car. After about one hour's ride without conversation, Harrison suddenly remarked,- "Talk about 'ROOT AND BRANCH' - this is where we get down among the roots!""

"FOR SERVICE" - Assistant Forester F. D. Mulholland puts forward a suggestion which might be worth our serious consideration. We shall be glad to have your comments on it.

"Some of us occasionally refer to a Forest Fire as 'the enemy' and compare fire-fighting to a war; and in fact fighting a number of large fires possesses many points of similarity to a military campaign. Moreover, we use 'soldiers' who are for the most part volunteers - and sometimes conscripts.

"In one direction, however, the similarity ceases, in that individual service by 'soldiers' showing a high order of courage, energy or exceptional ability is not recognised by the Government in any way except by the usual pay cheque.

"Would it not be possible for the Government, in such cases, to issue a button for 'SERVICES RENDERED' showing the name of the man and the fire. Alternatively, perhaps a personal letter addressed to the man, thanking him for his services and signed by the Minister, might show that we appreciated his help.

"My suggestion is, of course, only meant to apply to members of the public outside of the Forest Service, and only in exceptional cases, which would not amount to more than (say) half a dozen in each district in a season."

We have before us an application for a Permit, which reads - "Can you let me have a permit marked "for ever and ever;" same kind as are issued in Hell." The applicant has been notified that, as we have no jurisdiction over that territory, he should apply to the proper authority - in other words, that he should "Go to the Devil!"

"HOW IT IS DONE - On Wednesday night about 10 o'clock, on the Saanich Road, near Elk Lake, one of the party on a city-bound motor threw a lighted cigarette overboard and no doubt forgot it; but in less than fifteen minutes there were about thirty citizens hard at work putting out the resultant fire. A well-known citizen, who was in the neighbourhood at the time, says he saw the cigarette end light in the dry grass and immediately there was a brisk little fire burning, which ran along the fence line for some distance and kept the whole neighbourhood busy for some time."

****

"FINED $150. - Mr. J. W. McKenzie, jr., was summonsed to Powell River on Monday last to answer to a charge of setting a fire on Goat Island, Powell Lake, on July 1st. Mr. McKenzie pleaded not guilty, but the magistrate found otherwise and assessed a fine of $150 and costs, or sixty days. The fine was paid and notice of appeal given."

****

"The reason for all these fires is the number of Wardens chasing up and down the road," says an ex-Fire Warden of the old days. "Why, when I was a Warden and covered the whole country from ..... to ....., we had no fires. A book of permits was signed up and left with each settler, and there was no object in burning contrary to law."

****

"A COSTLY LESSON - At Vancouver, P. Long and W. E. Peck were each fined $150 and costs for leaving camp fire burning. 'Had it not been for the fact that you poured water on the fire before you left, and did all in your power to fight the fire after it started, I would have made the fine $300 and costs' said the Magistrate, in imposing sentence."

****

Says Mr. R. V. Stuart - "One very encouraging feature of this work is the attitude taken by some of the magistrates this year. Not only have fines been heavier, but in several cases magistrates, in giving judgment, have expressed their intention to do all in their power to assist the Department in putting a stop to the careless and wilful setting of fires. It is becoming more apparent every day that insignificant fines for fire-setting are to be a thing of the past."

*** *** ***

FEDERAL CHANGES IN B. C. ANNOUNCED - Kamloops, Sept. 7th. Information has been received from Ottawa that it is the intention of the Department of the Interior to reduce the Federal Forestry Branch here to a sub-station to be administered from Calgary. D. R. Cameron, Inspector here, has been transferred to Ottawa; D. M. McDonald, Supt., will go to Winnipeg, and Jas. Smart, Asst. Inspector, to Calgary.

CURTAIN CALLS - Last month we invited the boys to step on and tell us just what they think of "ROOT AND BRANCH." Here's what they say.

"I appreciate Root & Branch very much, and look forward to its arrival each month." "Without being guilty of trop de zele (or some other analogous metaphor) may I say that I consider Root & Branch worthy of the highest praise. I realise through its medium that the Forest Branch is just one big family. A paper of this sort can't help promoting the highest feeling of confidence and co-operation among its members." "Root & Branch is fine - the connecting link in the Forest Service. Stay with it but don't be in a hurry over hearing from the field-men; give them time for a breather." "It is rather late in the day, but I would like to take this opportunity to congratulate the Editor and those responsible for the publication of Root & Branch on the well-deserved success that has attended their efforts. The motive back of the periodical is so transparently good that further comment would be superfluous. Rest assured that so far as the members of the Vancouver staff are concerned, R. A. B. is a big success." "When are we to receive the next number of R. A. B.? This is a question I have been asked on numerous occasions, in various parts of the Province. Now, Mr.Editor, does this answer your question as to what the boys think? When we were little boys we asked for "More" and now that we are just the same little boys grown up we will still ask for "More" of what meets with our approval."

Well now, that's fine, and we are frankly and unaffectedly delighted.

Help us discard the Paste-pot; that's all we ask.

AGAIN! "THE LADIES" - "C.S.C. awards the 'Hello girls' a hearty vote of thanks for their active help during the strenuous time lately, and they well deserved it, as they have certainly been right up on their toes. But there is also a large measure of credit coming to the real 'Comrades-in-arms' of the field men. I refer to the wives of our officers, who have been of immense help during the recent forays of the Red Dragon. In many instances some of these ladies have, literally, been glued to the 'phone - to the vast discomfiture of pies and cakes. They deserve at least three cheers and a tiger for their unselfish assistance."

AT THE LIVERY BARN - "Say, what's the matter with this horse?" "Aw, he's all right. He's been ridden a lot lately by a lady with pants, an' now he has a stiff neck."

PERSONAL PARS

Our heading "Social and Personal" has been criticised as displaying a lack of originality, and our critic suggests that a happier title would be "Perscnal Pars." We agree that "Personal Pars" is more distinctive. We'd have thought of it ourselves, of course - sooner or later.

This month we welcome to our midst Mr. George Hill, who succeeds Mr. A. M. Tyson as Supervisor's Assistant at Ocean Falls. Mr. Hill comes to us from the Collecting Branch of the Taxation Department in Vancouver, and is well and favourably known to many of us. We trust he will feel at home in the Forest Branch and shall be glad to hear from him by and by.

Also Miss G. L. Dando, who has been appointed to the office of the District Forester at Nelson; and Gordon Cahilty, who joins the staff at Kamloops. Gordon is a young lad, and has a chance to grow up amongst us.

Supervisor J. C. MacDonald (Vancouver District) is at work again after an absence of about four weeks. We were up the Island last week on a holiday trip, and met Mac and Ranger Waddington on the road. They were both looking very fit. In a misguided moment we mentioned that we proposed to camp for the night at Nanaimo River, and now Mac is camping on our trail with searching enquiries about a camp fire which we are alleged to have left burning. We KNOW we put our fire out, but ever since we heard that Mac was gunning for us, our days and nights have been tortured by the question - DID we put the darn thing out, or didn't we?

We passed Asst. Ranger George Lowe's place at Cobble-hill on our way up. George has quite a place.

"I could not love thee, dear, so much, loved I not honour more!" Patrolman Mike Andrews, who is stationed at Campbell River, had arranged to be married early in July, but owing to the extremely severe fire situation at that time he simply could not take the time and did not ask for it, but postponed his wedding until rain came. Rain on August 9th gave him his chance, and Mike is now a happy benedict.

Assistant Ranger Perrin (Vernon) pulled a similar stunt, about the same time. Jupiter Pluvius and Hymen are odd team-mates but they do work in harmony, it would appear, every once in a while. We congratulate Messrs. Andrews and Perrin very heartily, and wish them every joy and happiness.

Congratulations are in order, too, and we extend them freely to Ranger P. E. Sweatman and Station Foreman C. D. MacKinnon, both of the Vancouver district - to Ranger Sweatman on the birth of a son and to C. D. MacKinnon on the birth of a daughter. We welcome the little folks whole-heartedly; if "Root and Branch" lives long enough, who knows but we may have occasion to bracket them again in "Personal Pars!"

Ranger O'Grady (Vancouver) recovers slowly, but we are glad to say that he appears to be definitely on the mend.

We were in Alberni last week, but were denied the pleasure of meeting Ranger G. L. Davis, who was absent down the Canal.

Asst. Ranger T. A. Greensmith took to himself a wife on August 26th. Best wishes to Mr. and Mrs. Greensmith.

District Forester McDonald, Nelson, states that he has been so much in the field during the past few months that, when he does manage to put in an appearance at the office, the staff say - "Yes, sir - and what can we do for you?"

Last month we made reference to a little episode, in which Asst. Ranger A. R. Beattie figured, involving the loss of a dinghy. It appears that Ranger Sweatman and Asst. Ranger Beattie were held to be jointly responsible and were assessed in equal amounts; and we are informed that Beattie has come through like a good sport and is back on the job again. Atta-boy!

Jim Blake has unearthed another fire-fighting dog. The story is embellished with a wealth of irrelevant detail - for instance, that the dog's name is Tim and that he belongs to a Mrs. Green, of Cowichan Lake - but nothing is said as to the dog's method. There is simply the bald statement that he's a fire-fighting dog. Perhaps Asst. Ranger Burchett would like to take the stand?

We knew a dog once (this was back on the Ould Sod) whose name was Three Waters. He belonged to a Lodging-house keeper. We used to think the name an odd one, until it developed that the Lodging-house keeper when cleaning up the supper dishes used to confine herself to the cups and saucers and left the plates to the dog. When we remonstrated on the dingy appearance of the plates, she would say - "Dirty, are they? Och, but yez are hard to plaze. On my sowl, they're as clane as three waters cud make thim." Fact! The dog belonged to a Mrs. Peter J. McGonnigle, who lived three doors from the Post Office.

THE STORY OF A MATCH.

"Here is a pretty state of things," said the traveller. "Dying for a smoke, only one match left, and that certain to miss fire! Was there ever a creature so unfortunate? And yet", thought the traveller, "suppose I light this match, and smoke my pipe and shake out the dottle here in the grass--the grass might catch on fire, for it is dry like tinder; while I snatch out the flames in front, they might evade and run behind me, and seize upon yon bush of poison oak; before I could reach it, that would have blazed up. Over the bush I see a pine tree hung with moss; that too would fly in fire upon the instant to its topmost bough. And the flame of that long torch - how the trade wind would take it and brandish that through the inflammable forest! I hear this dell roar in a moment with the joint voice of wind and fire. I see myself gallop for my soul and the flying conflagration chase and outflank me through the hills. I see this pleasant forest burn for days, the cattle roasted, the springs dried up, the farmer ruined and his children cast upon the world. What a world hangs upon this moment!"

With that he struck the match, and it missed fire.

"Thank God," said the traveller, and put his pipe in his pocket. - (Robert Louis Stevenson.)

FOREST PROTECTION RECORD - AUGUST 31st.,1922.

	Fires.	Avg.Cost.
Cariboo	92	$ 87.
Cranbrook	176	$227.
Kamloops	160	$131.
Nelson	386	$207.
Prince George	276	$118.
Prince Rupert	266	$244.
Vancouver	782	$205.
Vernon	146	$ 82.

One of the main objects of this Journal is to provide a medium through which to express views on topics of general interest, to advance suggestions, and to promote discussion. At the same time it should be understood that our giving them publicity does not necessarily indicate that we are in accord.

****

Asst. Ranger H. G. Reynolds writes - "Apropos of untried methods, of Fire prevention, the Indians, I believe, are the cause of a large per-centage of our fires and it is very hard to make them deviate from their old habit of burning off the range and Jack-pine to make better hunting. The idea occurs to me that, if the Indians were forced to obtain a permit prior to going on the range during the fire season, it might reduce the number of fires considerably."

****

From Asst. Ranger A. Wightman - "From the little experience I have had with the fire pumps, I find the lengths of hose too long and very awkward to handle in thick brush and timber; for unless you get them stretched out straight, they kink and stop the pressure. In my opinion twenty-five foot lengths would be quite long enough. Also a spray nozzle would be much more effective for ground fires than the tapered ones." (We should like to hear more about this. Ed.)

****

"Preserve the Beaver," says I. M. "A beaver meadow makes a good fire-break."

*** *** ***

There's a man on the Street Cleaning squad in this city who is quite a wag. The other day a party of motoring tourists accosted him with a query in regard to the red-brick building on Douglas Street. "That," said our friend of the S.C.D., "is the City Hall. The large white building up the street is the Hudson's Bay Company's new store. That tall building over there on your left is the B. C. Permanent Loan block. Down there (you can just see the roof) is the Empress Hotel, and over the Bay - that big building with the dome - is the Parliament Buildings. We've quite a city here, don't you think?" "No, I don't quite agree with that," said a lady in the party, "I think it's just a little one-horse town." "Madam," said our friend, "if you had my job you wouldn't think that!"

*** *** ***

It's an odd thing, but probably some of you who have been here have noticed, in regard to our Inner Harbour, that the lower it is the "higher" it is. Yeah.

DIPLOMACY - (being part of a telephone conversation with a contributor who forwarded us a POME) - "Hello! ..... Yes. ..... Who? ..... Oh, yes. Yes? ..... Poem? What poem? (we are just stalling now) ..... Oh - er - er Yeah, we got that one. Awful guff ..... What? ..... I said 'Great stuff' - Yeah ..... Did we read it? Why, sure we read it - what we could ..... What? ..... I said 'Very good' - Yeah ..... Why didn't we publish it? Well now, y'see - er - er - it's this way - er - er (Long pause; business of jiggling the hook) Oh, there you are. We were cut off, I think. Yeah. Well now, y'see - er - er - we didn't have the face ..... What? ..... I said 'we didn't have the space.' SPACE. s-p-a-c-e. Yeah ..... Oh, sure. Y'betcha. Goo'by."

(My goodness gracious! It's hell being an Editor. And we are willing to bet that that guy could write first-rate prose. We are not over-critical, we hope, but we still cling to our ideals, especially in regard to poetry. The Muse must be wooed - it's no use going after her with a club. And poetry, to find a place in these pages, must at least pass the rudimentary tests. (Please don't get sore with us). Does it rhyme? Does it scan? If not, put it in prose, brothers, put it in prose!)

We have withheld a lot of really good stuff this month, not so much on account of space as that we feel we have been rather improvident in the past, and we want to build up a little reserve fund on which to draw for future issues - that is, until we can be guaranteed a constant supply.

A bag of wrenches underneath the car;
Some oil and grease as black as any tar;
And you beside me in the dust and dirt
With sullen oaths to tell me where you are!

The dripping oil drips on, and having dripped,
Has left a smear of grease. A wrench has slipped
And knocked a tooth from out my smiling face;
And when I move I feel my clothes have ripped.

"Like wind along the waste, forever blowing,"
Your sage advice is ever, ever flowing.
I twist and pry and pull at this and that -
But when we'll fix this car there is no knowing.

A Scotchman ambled into the fifteen cent store here the other day, and asked to be directed to the Shoe Department.