

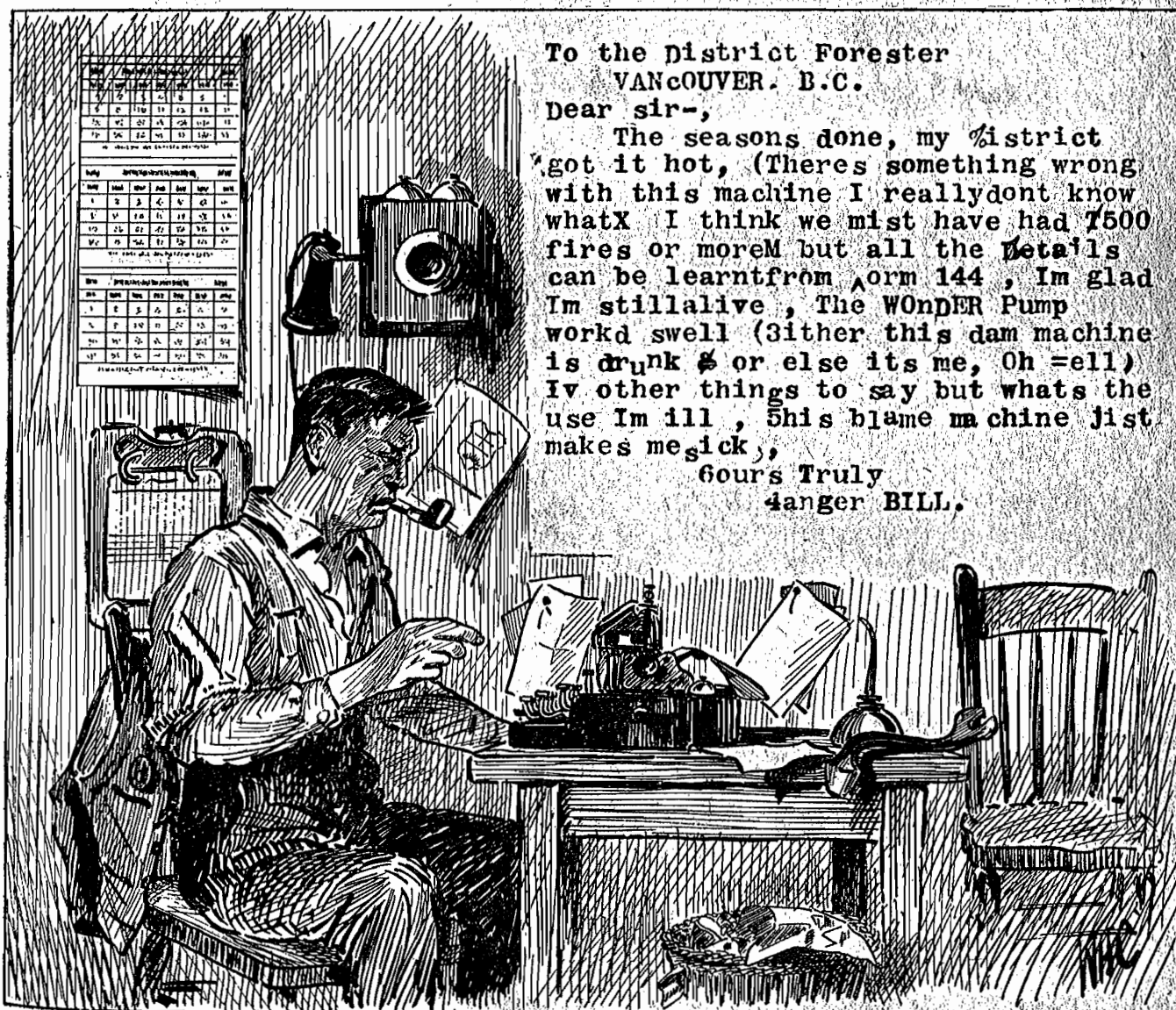
ROOT AND BRANCH

BRITISH COLUMBIA
FOREST
LANDS SERVICE
DEPARTMENT

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WHAT IS YOUR PROBLEM?

I was quite sincere when I told the Editor the other day that I intended giving you a rest this month; so perhaps I had better tell you why I changed my mind.

Earlier in the evening I was sitting in my chair with a pipe and a book, in front of a bright coal fire. I put the book down and looked into the fire, and the picture I saw there was of the members of the Department scattered all over the Province - big groups around Victoria and Vancouver, and smaller groups in Vernon, Nelson, Kamloops, Cranbrook, Prince Rupert, Prince George, the Cariboo and other places; and I thought what a goodly company it was - nearly four hundred permanent members, in addition to the extras put on during the Fire Season.

How scattered that Company is! The Minister away off in old London, surrounded by eight million people, trying to work out his problems of immigration and railroads, and Pulp and Paper Companies, and the best method of developing this wonderful Province.

The Water Comptroller in Winnipeg, studying immense water power problems and how the experience of other places may help in the solution of the best methods to be used here. The Ranger at Finlay Forks, and the cruising parties on the Nass River in far Cassiar, getting information for the Chief Forester and his staff, to enable them to work out a solution of their problems.

Major Clark has just returned from INDIA, having spent the greater part of the summer there, trying to get good settlers for the Province, and helping the Imperial Government to solve the problem of how they can best help the surplus officers being retired from the Army.

Every Ranger and every Scaler and every District Forester has each his own problem to work out. And the success or failure of the Lands Department depends upon how well, or ill, each individual solves his or her own problem, from the Minister down to the Office-boy.

Primarily we are each trying to solve our individual problems for the purpose of obtaining food and clothing, shelter and recreation for ourselves and families, but the effects of what we do have a far-reaching influence which may be world-wide. Who can say what it meant to the Empire and the cause of the Allies in the war to have the immense quantities of aeroplane spruce shipped from British Columbia? And I think perhaps to our former Chief Forester

M. A. GRAINGER, should be given more individual credit than to any other person for that great effort.

I have not said a single word of what I intended should be in my next article, but have written this purely for my own pleasure, for I feel that in doing it I have spent an hour with the various members of the Department scattered from Victoria and Vancouver, to London and Peace River and Cassiar.

Geo. R. Naden.

If it were feasible to call in all the field men at regular intervals (once a month, say) for a general pow-wow, it would be a fine thing and enormously beneficial. It's not feasible, of course; but suppose, for argument's sake, that it could be done.

All hands would attend, and we would all foregather; and, after the proud father had been duly congratulated, and the newly-wed had responded with embarrassed grins to the felicitations of his fellows, and the ranger who had had the ill-luck to hit a snag with his launch (or a stump with his car) had been sufficiently 'kidded,' we would get down to business.

Ranger A., conscious of no feeling of restraint in the friendly atmosphere around him, would frankly and freely speak his mind on the topic which most interested him, and his views would be received with approving nods or raucous laughter, according to their merits; and nobody would feel hurt or sore, because the same treatment would be accorded to everybody. Then Ranger B. would give us the benefit of his experience along some certain line, and Ranger C. would speak up and say that he had tried that same thing with rather unsatisfactory results, and the thing would be discussed from both angles. And so on, and so on.

It isn't feasible for us to meet in the flesh once a month, but we can meet in the spirit - through the medium of "ROOT AND BRANCH" which exists mainly for that very purpose. So let's hear from you. If you have some scheme in mind, spill it! If it's a good one we shall all be that much ahead; and if it's not, it's as well that you should know it and not go on harbouring an unworkable idea.

Editor.

It is with deep regret that we record the death, on October 13th, of Mr. W. Bolland of the Forest Accounts Office here. Mr. Bolland was not known to many of us outside of the Headquarters staff, but in his unobtrusive way he filled an important niche in our organization. We extend our very sincere sympathy to his widow and daughter.

THE MATTER OF "DOLLARS AND CENTS."

Bill raised his aching head for a moment and gazed with awe at the pile of scribbled and discarded paper which was assuming the proportions of a haystack beside his chair; then bent again to painstaking figuring, adding here, subtracting there, looking up catalogue prices and making still further adjustment. At last he gave up with a sigh. "H--! I'll just have to do without it for another year."

He was still thoroughly convinced that an automobile would be a perfectly sound investment for himself, that that vacation for his family was essential to avoiding a heavy drain in Doctors' Bills later on, and that the purchase of a car would certainly be good business. BUT-----his salary was still just \$2000 a year, interest was due on the mortgage, the cost of living was 'way up, and - on top of it all - this Income Tax to be paid! No! With all his figuring he couldn't find the money unless the boss gave him a raise; and already the boss had explained in no uncertain terms that, with business in the shape it was, he wouldn't stand for any increases. And so Bill was forced to abandon the project for another year.

Once each year we go through Bill's experience. For Governments are like individuals - they are limited by their income, which in turn is limited to what a taxable public will pay for the service of government.

Each year, when you see where a new trail, a new Ford, a new Pump, or an extra patrolman is needed, consider this - that other districts and services are doing the same. All these estimates, and arguments as to the absolute necessity of the various items recommended, come into Headquarters, where they have to be compiled and a balance struck with revenue, after interest and fixed charges have been met. There is rarely an instance where some things do not have to wait; some go into the 'hold-over' at Headquarters, some may have to be abandoned later on, and when the Estimates finally come before the Legislature, still further pruning may have to be done. While you and I are firmly convinced that this or that is essential, it may be like Bill's automobile - "A nice thing to have, BUT..."

You have now been asked to make out your estimates for next year's work. Keeping this little story of Bill's auto in mind may ease our work here now, and your disappointment later.

-; P. Z. Caverhill :-

STUMPAGE APPRAISAL

For the past three years our timber sale business has averaged a million dollars per year, in expected revenue. This is really big business. A store or factory that sold a million dollars worth of goods would no doubt consider it so. And no doubt such an organization would know more about the value of their product and the costs of production than we do; and in fixing the selling price, they would leave less to guesswork and conjecture.

In disposing of its timber, the Province stands in a unique and even a somewhat delicate position. The position might be described categorically as follows -

(1) The interests of the citizens and taxpayers at large are, that we dispose of the timber for the highest possible price, in order to bring in the greatest amount of revenue to the Provincial treasury.

(2) The point of view of the timber purchaser is, of course, the opposite - bringing to bear the usual arguments, and such stereotyped phrases as "encouraging capital to invest," "giving the small man a chance," "keep our mills running," etc., etc.

(3) The timber holder again is very zealous that we shall not put our timber on the market in competition with his timber, at least not at a lower price than he is holding out for.

It seems therefore that, in selling Crown timber under timber sale, we must preserve a careful balance between the conflicting interests, and this is just the ground which we try to occupy.

Our timber should be sold at its highest appraised value (to satisfy those desiring high revenue), a fair margin having been allowed, however, for risk and for a legitimate profit to the Operator, and for interest and depreciation on his investment (to satisfy Class 2). Then probably we should refuse to put timber on the market that can only be sold at a very low stumpage price, except, of course, in the case of salvage propositions. Such a policy, carefully carried out, would offer satisfaction and protection to all interested parties.

In order to deal equitably and fairly in each case, however, we should be prepared to base our stumpage appraisals on a sound method and on adequate data.

R. C. St.Clair.

(Mr. St.Clair proposes to continue this discussion in our next issue - Ed.)

WHAT'S THE ANSWER?

"You are old, Father William", the young man said,
"And your hair has become very white,
And yet you repeatedly stand on your head,-
Do you think at your age it is right?"

"In my youth", Father William replied to his son,
"I feared it would injure my brain,
But now that I'm perfectly sure I have none,
I do it again and again."

Utter nonsense, of course - but humorous just the same; and it carries a lesson. We have just concluded the most disastrous year in the fire history of the Province, when B. C. must at times have been perilously close to disasters similar to that which Ontario has experienced at Haileybury - and yet we have not received a single suggestion from the field as to how we can improve our methods. Are we going to do it "again and again"?

All that we seem to have got out of the fire season is that suction hose in 10-Ft. lengths would be better than in 15-Ft. lengths!!

I can appreciate fully the fact that each fire carries its own problems that must be decided on the ground; that each problem is a matter of local conditions, local sentiment, soil and moisture conditions, humidity, transportation, and men available. But each of these conditions is present in some way on every fire, and if we get a series of methods by which the various problems are solved we will be able to draw up general rules for the Service. There will be no need to "do it again and again".

Perhaps we in this office have been entirely wrong in the criticisms which it is our job to offer. But if we do not get from the field an idea of the complexities of each situation, how can we change our viewpoint? Merely differing in opinion does not lead to the threshing-out of any problem so that the matter is clear cut for the future.

We do not propose (and I know that the whole Service is with us in this) to be content with anything less than 100% efficiency. We are going to get it, somehow, sometime, but you must do your share. Don't worry about phraseology, grammar, or "any of them there frills", but just send in your IDEAS, so that not only ourselves but the other field men and the 'cheechakos' may benefit thereby.

We have a brain to injure - and we have a financial brain that is injured - and therefore we want to see what remedial measures we can apply.

There is the contentious point of when judgment should be used in not fighting a fire. This office has locked horns on this subject in a number of cases this year, and if we can clear up that point we will go a long way towards solving one point on which judgment and a varied experience is necessary.

Reports from Ontario state that the \$7-15,000,000 fire, which has caused to date forty-three deaths, was started by a farmer burning potato tops in a field "but a wind sprang up". Can we use this fact in our propaganda? With all the fires of this and previous years, surely there are some outstanding lessons that might be assimilated. It is up to you to tell us what they are.

----- C. S. Cowan -----

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"SOMEONE'S CARELESSNESS"- Our readers will remember the reference, in our July number, to the death of Mr. James Atkins of Forest Grove (in the Cariboo District) as the result of a fire on his place. The Final Report on the fire is now to hand, and we quote the District Forester's remarks since they afford one more illustration of the frightful consequences of "someone's carelessness."

"Mr. Atkins was very much afraid of bush fires; too much so in fact - so much that he did not ask for a permit to burn some piles of slash near his house earlier in the year. Someone had gone along a trail approximately 300 yards from the Atkins house, and had dropped a match (or a cigarette butt). A fire started, and passed on to a spruce swamp about 200 yards from the house. Sparks were carried to one of Atkins' brush piles. This was noticed by Atkins, who immediately picked up a garden hoe and rushed to the burning pile, which was situated just outside the fence. Throwing the hoe over ahead of him, he climbed the fence, and on reaching the top fainted from excitement and fell over on the ground. The fire then travelled to the fence. Deceased was badly mutilated, but was probably dead before the fire reached him. After burning the fence, the fire died out. No doubt, someone's carelessness was responsible for Mr. Atkins' death."

Mr. R. Randolph Bruce of Invermere, B. C., refers to the field force in that district as "a splendid lot". He says - "They certainly did well, and I think it is up to everyone of us to think out how we can help them in the great work of preserving our forest wealth."

THE BOSS AND THE VALUABLE EMPLOYEE

Disagreeing with the boss does not constitute a kicker. Most employees knuckle down and agree with everything the boss says. They follow the line of least resistance and seem to bask in the sun of that great indoor sport - agreeing with him in everything that he suggests or proposes. The valuable man is big enough, and has backbone enough, to disagree with the boss. He has opinions and ideas of his own and is not afraid to express them. He is the man who will go up every time, if he has the boss who is big enough himself to see the value in this employee.

Cream will rise to the top, and the old saying that 'you can't keep a good man down' obtains strongly in the business world. This 'yes-ing the boss' - for this is exactly what it means - is divided into two classes.

The first is the nut-brained individual who never had and never will have an original idea. He always says 'Yes', and our Mary's little lamb has nothing on him, as he is its progenitor. He is never late (in fact he is generally ahead of the appointed hour, even though he waits outside for as many minutes until the door is opened); he takes just his hour for lunch; he religiously quits just on the stroke of six. There being routine work in every organization and he being able to do it, he is considered a more or less necessary evil.

The second is the fellow who really has good ideas of his own, but is so lacking in courage that he does not dare to state them. The big fellow tells him how such and such is to be done; and while he knows his own idea is better - as he is more accustomed to handling that work - his spine fails to work and water instead of blood runs through his veins. He says 'Yes'. He is a little higher than the other fellow but he gets no farther - there are no other rungs in the ladder for him. He is afraid the boss wouldn't like his suggesting anything else and might lose his goodwill.

There are, however, two classes of men who don't always say 'Yes'. The first is the pin-head who is so small as not to see the value in any suggestions but his own. He will spend much time arguing over trifles, and every miserable little thing he can find, and when matters are finally decided he continues with his petty objections. Pin-head stays around because the boss knows he has ideas and is not afraid to suggest them, and hopes that some day the narrow mind will broaden out.

Then there is the fellow who has his own ideas, and is not afraid to speak out and mention them, but is broad enough to admit that the other's plans are better. He then gets behind the idea with his whole soul and pushes. He develops in detail everything that is in favour of his plan and also takes into serious consideration every detail of other suggestions. Taking the standard of what is best for the business and for all concerned, regardless of who suggested it, he accepts gladly his share of carrying the load.

For goodness' sake, suggest a plan or an idea if you have one, whereby better results can be obtained from this or that, or something done better. Offer it. The boss cannot follow every detail of all departments and everything going forth from each desk. You are paid and expected to improve your work, to study it, and no matter how unimportant your job may be, stick to this principle. The boss wants your ideas. If you find someone else offers a better idea, get behind it and be broad enough to accept it.

If you fail to suggest, you cannot be of practical help to the boss.

Always agreeing with him won't help him. You are not preparing for a better job and larger responsibilities, if you are passing your business years always kow-towing to the opinions of the boss.

(J.H.P. in the "Western Lumberman.")

Apropos of the remarks by Asst. Ranger Wightman, in our last issue, in regard to Fire Hose, Asst. Ranger Wilson (McBride) makes some pertinent comments-- "We would agree to the suggestion of Asst. Ranger Wightman to use 25-ft. lengths of hose on the nozzle end of the hose line. In fact we have already done so by cutting out a worn hose to about that length. It worked very well but a rubber or wire hose of that length would be more suitable; it would not so readily bend or kink. When a full length of hose is working under a heavy load a kink will not only stop the pressure but will sometimes stop the engine. In ground fires we had to break up the ground and apply a steady strong stream on the burning material to extinguish it; therefore we cannot agree with Mr. Wightman that a spray nozzle would be more effective. A spray nozzle might be useful to wet the ground beyond the line, when back firing.

"We have found that the pump will not deliver a sufficient pressure of water with 1000 feet of hose line out and 150 feet elevation, to be effective. However, we were able to deliver a good stream at 2000 feet by cutting in a second pump directly into the hose line; the second pump maintained the momentum of the water and delivered a strong stream at the nozzle end. The primary pump was worked to capacity, while the auxiliary was run with throttle about three parts open. In the case mentioned, the first pump was installed on a raft which made an excellent set."

(We are seriously considering the use of 10-ft. lengths of rubber-lined canvas hose. What do you think of the idea? - Ed.)

PULP TO PAPER

The manufacture of paper, as distinct from the manufacture of pulp, starts in the Beater Room. Pulp is not paper - it is merely one of the raw materials of paper, of which there are a number of others of lesser importance, e.g. clay, size, colors etc. The beating engines are large, oval, tank-like machines, having mounted therein a drum constructed of 78 steel bars or knives. At the bottom of the tank directly under the drum is a bed plate made up of 42 knives and set at an angle to the drum. As the drum revolves with its 78 knives coming into contact with the 42 knives of the bed plate, it gives 3,276 cuts for each revolution. At an operating speed of 100 revolutions per minute, 327,600 cuts per minute are delivered to the material forced between the drum and bed plate. Into the beater the operator feeds the various ingredients to make paper, depending upon the grade of paper required, usually termed "stuff", and, in general, consisting of ground pulp, sulphite pulp, fixing solution, size and clay filler. A standard beater's capacity is usually 1,500 pounds of "stuff". Referring to the drum knives and bed plate knives may have caused the reader to think that the main purpose of this machine is to cut the pulp fibres into a given length, which is correct, but is not the only function of this machine, the others being to separate bundles of fibres, and to brush and stroke the fibres into greater flexibility. The knives stroke out the fibres in the same manner as the hair brush strokes out human hair, but, moreover, cause the fibres to curl at the ends, which when formed into paper, causes the fibres to connect with each other and "bond". The strength and toughness of paper depends upon the "bonding" of the fibres. Newsprint has only a small percentage of sulphite or sulphate pulp, with the result that it is more of a "felt" paper than a "bond" paper. The time for working the "stuff" in the beater varies greatly according to the class of paper being made. While preparing for the manufacture of blotting paper only 1½ hours would be needed, but for thin strong papers 6 hours are needed.

In the basement of the beater room are a number of Stock Chests arranged for receiving the finished stock from the beaters preparatory to being pumped by a centrifugal pump to the Jordan Machine. This machine consists of a conical cast-iron shell fitted inside with narrow steel bars and rotating inside this shell is a conical casting called the "runner" fitted with steel bars or knives. The runner rotates at 350 R.P.M. The rollers or knives of both the shell and runner are accurately ground and are arranged to

deliver a shearing out to the stock, much in the same manner as a lawn-mower. The Jordan engine gives the paper stock the last refining touch before it goes to the paper machine where, through its having been forced and cut between the very small space between the runner and the shell, it has become consistent and homogeneous, and is now ready for the Paper-making Machines.

The machine ordinarily used for making paper is the Foudrinier machine. It consists essentially of a device for allowing the prepared paper pulp to flow onto a horizontal wire screen made in the form of an endless belt, and traveling constantly away from the point where the pulp flows onto it. The water in the pulp drains through the wire, and when this pulp reaches the end of the wire screen it passes between a series of felt-covered rolls which extract more moisture from it. Next it passes through a long series of steam-heated steel rolls, always supported by a layer of felt which travels with the paper, until practically all the moisture has been drawn out of it. Finally the paper passes through polished calendar rolls, which give it a finish, and onto rolls where it is wound up.

These reels then go to the "Finishing Room", where they are re-wound and cut in a manner depending entirely upon the purpose for which the paper is to be used, varying all the way from the very simple state of affairs in a newsprint mill where the rolls are shipped practically as they come from the machine, to that in a mill making a wide line of book or writing papers.

The storage and shipment of paper require close attention as rolls of paper are easily damaged at the edges, necessitating the reeling-off of all damaged paper and re-winding with fresh paper. If paper is stored carelessly it will lose its cylindrical shape, and later on cause a great deal of trouble when unwound on modern high-speed printing presses, as the paper then unrolls in an irregular manner.

- G. PORTER -

Parchment is probably the oldest known substitute for paper. Then followed papyrus, made from a reed found on the Nile. Paper was first made by the Chinese, and later by the Arabs. In the 11th Century it was introduced into Spain by the Moors, but it was not until the 14th century that paper was made in Italy and France, when cotton and hemp were the raw materials used. Paper was first made in America in 1690. In 1803 Foudrinier built, in England, the first machine for making paper in a continuous sheet. Ground wood pulp was not manufactured until 1840, and the manufacture of sulphite pulp was commenced in 1866.

A HOLE IN OUR COATS?

If there's a hole in a' your coats,
I rede ye, tent it!
A chiel's amang ye, takin' notes,
an' Faith, he'll prent it!

(Burns)

The other day we were glancing over a paper written by a candidate for a position as Assistant Ranger. It was a good paper, and the writer of it went right along making a consistent score of 'Bulls' and 'Inners' until he was asked - "What are the regulations in regard to payment for fires on land paying Forest Protection tax?" He stubbed his toe badly on that one. But his aggregate was high; he passed and was appointed; and (here's the hole in our coat) he was allowed to function for an entire Fire Season under the impression that "Fires fought on lands paying Forest Protection tax shall be charged to Forest Protection Fund."

Now, wouldn't it have been better if, when appointing him, someone had looked over that candidate's paper to see if there was any point upon which he was not quite clear and corrected him on it? Of course, we merely cite this particular case as a case in point; we are suggesting that the idea be applied generally. Had it been done in the case in point, the appointee would have been set right in regard to the regulations before taking up his duties, instead of being allowed to remain in ignorance and possibly be the means (innocently, of course) of disseminating some very misleading misinformation.

THE "COTTONWOOD". - The latest addition to our fleet is named the 'Cottonwood'. She is a handy little craft of 38 feet over all and 9' 6" beam, with a 2-cylinder 4-cycle Vivian engine of 16 H.P., which drives her at a speed of from 8-9 miles per hour. An important part of her equipment is the radio-telephone which in her case has a radius of from 40-60 miles. Her two masts (made necessary by the 'wireless' installation) and her dinghy slung inboard on davits, give her a very distinctive appearance. Douglas Fir has been used extensively in her construction. The workmanship throughout is excellent, and altogether she reflects great credit on her designer, Mr. E.B. Schock, Naval Architect, of Vancouver, and her builders, Messrs. Erickson & Ball.

"If you don't think Co-operation is necessary,
watch what happens to a wagon if one wheel comes off!"

SPREADING THE LOAD

Two years ago a "Business Analyst" or "Efficiency Engineer" in Toronto offered to reorganize the shipping department of a very large undertaking. His fees were substantial, and his services were at first refused by the management on the ground that he could not possibly acquire a grasp of the business, in a reasonably short time, to enable him to criticise effectively the existing methods of men who had been for years at the game.

The analyst then asked for, and was given, twenty-four hours in which to obtain and assemble accurate data, and to produce therefrom some conclusion of admitted business value.

Well within the allotted time he exhibited a composite chart or "graph", proving that the greatest number of men were employed in the shipping department during a certain portion of the day when the weight and number of packages to be handled was at its lowest. Prompt readjustment resulted in handling more goods in less time, more uniform pressure on the individual, and a substantial saving in overhead cost.

How came the previous state of affairs to be overlooked by the inside executives?

Each was absorbed in the work under his immediate control - the paymaster in his time-clocks and pay-rolls; the shipper in his packers, trucks and business with the railroads; and so on up to the Board of Directors, who were immersed in raw material markets, dividends, general policy and the agenda of meetings. None had the advantage of the business analyst who could approach any plane of investigation from all angles instead of a limited number only.

Try this method, if you feel - or even suspect - that any aspect of your work is getting top-heavy or out of balance. If each of two jobs is a fair undertaking for two men, see to it that they are "two and two", not "three and one."

The principle has an infinity of applications - and the best ingredients of a successful analysis are a square meal, your favourite smoke, and a quiet corner. Put narrower issues out of your mind for the time being. Analysis is a jealous mistress who will entertain no rivals.

-: Crompton Brown :-

"With due acknowledgments to both Kipling and Mr. Cowan - 'Just keep your light so shining, a little ahead of the rest', - to my mind Mr. St. Clair in his article on 'Minimum Requirements' has provided at least one immediate and direct means of applying the text. I refer principally to the creation of Forest Reserves, not only in regard to their resultant value in supplying us with much needed silvicultural data, but also in relation to the systematizing of fire prevention methods, which have been put to such a severe test during the past fire season.

"To locate, establish and map these Reserves is of course almost an impossible task for the personnel of a District Office or for Rangers and Assistant Rangers, all of whom are more than fully occupied at all times. But might it be suggested that next season, if no urgent cruising projects are in hand, parties be organized along the same lines as the cruising and reconnaissance parties of the past two seasons, and - from advice furnished by District Foresters - proceed to lay off and make studies on such areas that they may recommend. It is reasonable to state that one such party working in each District for (say) three successive years could accomplish enough to give us at least a primary working knowledge as to 'Minimum Requirements' both silvicultural and protective, over areas that are liable to be of commercial importance, even as far distant as fifty years from now. More detailed studies could be made later on in accordance with immediate requirements.

"The importance, and even the necessity, of the establishment of Forest Reserves has been impressed upon me during the past six weeks, spent in the Burns Lake - Francois Lake - Babine Lake vicinity. It is safe to say that seventy-five per cent of the people up here owe their very existence to the cutting and sale of ties to the Railway. Few of the ranches, no matter how good, will of themselves provide a living for their owners. Their one alternative is to cut ties. Yet this year, in this District, millions of ties have gone up in smoke, and many more millions of smaller trees - the ties of twenty and twenty-five years hence - have suffered the same fate. As time goes on the cutting of ties must of necessity recede to areas further and further from the Railways. The country is easily accessible and there are hundreds of square miles of excellent future tie timber to provide a livelihood for the people and to support an important industry for years to come - but only if protected from fire. It is all 'absolute forest land', should be made a Forest Reserve, and should be administered as such. This is, of course, only one case to illustrate the point.

"The public, of course, must be educated to an understanding of the purpose of these reserves, and the ultimate benefit to the Province. And it should be made plain that they are not to be denied the freedom of the forests, even though a certain amount of supervision is exercised for the suppression of carelessness."

(T.A. Clarke, Junior Forester, Prince Rupert.)

The views expressed by Mr. Clarke on the subject of "Forest Reserves" impel us to quote again from Kipling -

"The great American nation - which individually never shuts a door behind its noble self - very seldom attempts to put back anything that it has taken from Nature's shelves. It grabs all it can, and moves on. But the moving on is nearly finished and the grabbing must stop; and then the Federal Government will have to establish a Woods and Forests Department the like of which was never seen in the world before! And all the people who have been accustomed to hack, mangle, and burn timber as they please will object, with shouts and protestations, to these infringements of their rights."

(Kipling - "From Sea to Sea" - 1889)

WE THANK YOU! - You will notice that our cover this month is on Kraft paper, and the contents on newsprint, in both cases actually produced in this Province by the Pacific Mills Limited and the Powell River Company Limited respectively; and we take this opportunity to express our warm appreciation of the delightful courtesy extended to us by these friends.

From the Pacific Mills Limited - "We have written our Plant to send you five hundred sheets of our heaviest Kraft paper, and we will ask you to accept these with our compliments."

And from the Powell River Company Limited - "We shall be very glad indeed to contribute newsprint for this issue, and we shall have shipment made to you immediately on your advising us of the exact size you would like the paper cut."

We have before us a copy of No. 1 of the Powell River DIGESTER, the new house journal of the Powell River Company Limited. This is a smart little paper, well printed and plentifully illustrated, and we enjoyed it immensely. In fact, we have gone so far as to appropriate from it some items for "Root and Branch"; and if our friends at Powell River can make use of anything of ours at any time we shall feel complimented by their doing so.

Small Boy (to another, on seeing the barber singeing a customer's hair) - "Blimey, Bill, 'e's lookin' for 'em wiw a light."

A CRITICISM-- (AND A WARNING!) - "On Friday the 15th instant, at 8.30 a.m., while I was proceeding to Victoria, just outside Duncan city limits, one of the Forest Branch cars passed me. At the time I was going at twenty-eight miles per hour and they must have been making at least forty! Unless they were going to a fire, there is no excuse for driving at such a rate of speed. In the first place, the equipment won't stand it; and next, it is a poor example and will cause comment to see Forest Branch cars driven in such a reckless manner."

Our correspondent is right, and we cannot condemn too strongly the recklessness of which he complains. We have pointed out on more than one occasion that, even when proceeding to a fire, it is poor policy for a Ranger to throw caution to the winds, and jeopardise not only himself and his equipment but also the safety of other road-users. Let's have no more of this - it's bad business!

THE GUILILESS TOURIST.- The following is extracted from an article which appeared in one of the local papers recently over the signature of Bessie Ryan, in which Bessie describes her automobile tour of Vancouver Island -

"After breakfast and packing up, we set off for Alberni, going through the forest, and seeing the huge trees gave one a feeling of awe. It seems the B.C. Government employ an elderly Dutchman to choose the trees that are doomed to fall. He knows in a moment - it is a gift - for this valuable service he gets \$50. a day."

We share Bessie's feeling of awe, but in our case it is inspired by the Fifty Dollars per day.

"I have been receiving the various numbers of ROOT AND BRANCH" (writes Mr. Clyde Leavitt, Chief Fire Inspector of the Board of Railway Commissioners for Canada) "and want to thank you most sincerely for your courtesy in placing my name on the mailing list. It is a splendid publication and I am sure that it must assist very strongly in knitting your organization together and in establishing that fine spirit of public service which is so essential to efficiency in an organization such as yours."

NEW USES FOR WOOD - The president of a large Pulp and Paper Corporation is the authority for the statement that soon paper milk-bottles will be in general use. These bottles are more sanitary and, being hermetically sealed at the dairy, the milk is kept sweet for twenty-four hours longer than in the ordinary glass bottles. They are discarded when empty and even so it is estimated that the cost of supplying paper milk-bottles will not exceed one half the expense in breakage and cleaning of glass bottles. The requirements of Chicago alone would be one thousand tons of pulp per day for this purpose.

Negotiations are also being carried on with the Ford Motor Company for the substitution of paper pulp for sheet metal in the construction of car bodies.

In California, paper piles are now being used. These are up to 60 feet in length and from 18 to 30 inches in diameter. They can easily be treated so as to prevent the attack of teredo worms and other marine bodies. A steel cap is fitted over the top to take the shock of the pile driver.

The preparation of a plastic wood (a collo-dion preparation) is another new wood product. This is made from fine wood meal and is of the consistency of putty. It is said to be waterproof, will set hard, and can be turned in a lathe. One's imagination is taxed to conceive of all the uses to which such a material could be put.

The other day, someone said to us - "Say, have you heard the last Ford joke?" and we said - "Well, we certainly hope so." But it would seem from the above that Henry is about to provide the joke-smiths with some brand new ones. "Paper bodies" should keep them going for quite a while! Too bad. They can say what they like about the flivver - she's a rattling good car.

A pair of "patter" artistes were endeavouring to arouse an apathetic audience, but without much success. Suddenly one of the team advanced to the footlights and raised his hand. "Friends," he said, "I believe we have with us tonight a man whose name is a household word, not only in this country but throughout the civilised world. I refer to that captain of industry, Mr. Henry Ford. Will he be so good as to stand up?" There was no response. "Are you certain" queried his partner, "that Mr. Ford is in the audience?" "Why, sure. I saw his car parked outside."

"Clever Magazine Tells of Work of Forestry Service. -

Efficiency and co-operation among the men who are protecting the forests of British Columbia is being promoted through the medium of a breezy publication 'Root and Branch' which carries in each of its issues a number of interesting and instructive articles. Leading Forestry officials have contributed articles to 'Root and Branch,' and these explain the workings of the organization which annually saves the Province millions of dollars by preventing and fighting Forest fires. Various phases of the lumber industry also are described in the paper, which should go a long way in cultivating esprit de corps in the Forestry service." (From the Victoria DAILY TIMES).

(We quote these extracts simply that all may share in the pleasure which it affords us to know that your paper is well thought of by our friends outside. That fact, we think, has now been sufficiently established, and we shall not refer to it again. Ed.)

Adverting to our article on "Clover Fire Breaks"-
we quote the following from the COMOX ARGUS. -

"The seeding down of the burnt areas at Merville is proceeding apace, under the direction of Mr. H. S. Hopkins. Eight men with hand seeding machines are spreading the white clover, the alsike clover, timothy, orchard grass and rye grass broadcast. In addition individual settlers are sowing down their own land. Among the stumps the work is being done by hand. About five tons of seed have been scattered so far."

This practical demonstration will be watched with considerable interest by the Forest Branch, since it contains not only possibilities of fire controls, but also probabilities of future fire works!

"Governments do not differ from individuals. The man with small earnings and large debts outstanding cannot borrow further; he who has large earnings and small debts is in a position to borrow almost as extensively as he pleases. There are no magic boot-straps or short cuts in finance; and those who think the Government can perform fiscal miracles which differ in principle from the operations possible to individuals are either dazzled by the mere size of the Government or are congenitally unable to apply commonsense principles to their thinking."

A MOAN FROM "OPERATION"

Say, boys! I've something on my chest that fill my soul with care - that banishes my rightful rest - that thins my whit'ning hair. Now I've been checking up the bills, from Rupert to Big Horn. My head's bowed 'neath a thousand ills, and I am made to mourn.

It seems to me that garage men are bandits, yeggs and thugs; each motor shop an evil den where men swarm round like bugs. The charges made for manifold, for sparkplug, spring or horn, should earn them years in prison cold - they should be shot at dawn!

I sometimes think - "Gosh darn my socks! Why can't you Forest men shake up the spanners from the box, and fix old 'Liz' or 'Hen'?" The spark is jammed and on the blink, or muffler gears are gone, or else the flywheel's lost a link - Why stand around and yawn?

Cut out the speeding up the hills, through valleys this fierce flight, and help to 'bust' those juicy bills and treat your 'Lizzie' right. Have pity on a wretched wight, who tossing lies 'till dawn, a-figuring out with all his might, with visage drawn and wan!

Now, if you needs must doll your cars with pretty things so nice, you'll have to dig down in your jeans and pony up the price! For I have troubles of my own; at banks we're overdrawn. (Oh that these cars I'd never known, and I had ne'er been born!)

That's why my life is full of gloom and also why I'm sad. 'The powers that be' get after me and nearly drive me mad. They say - "Why all these awful crimes, and why is this car worn?" I've learnt with 'Robbie' in his rhymes that 'Man was made to mourn.'

A Ranger makes this suggestion - "Say, listen here! I keep a file at home for little memos of jobs I have to do from time to time, and I am thinking of hanging up another one marked 'R.A.B.' where I can file anything that I see or hear that might be useful. How's that strike you?"

That hits us right where we live! And we have pleasure in moving that the suggestion be adopted forthwith and generally.

FIELD NOTES

From Vernon - "I wish to make special mention of the splendid co-operation received from the Volunteer Fire Wardens and the general public. There were a number of cases where public-spirited citizens took prompt action in calling this office to notify us that fires had started, thus enabling us to get men on the fire-lines in less than an hour. This saved us many dollars in fire-fighting costs. And, further, there are five outstanding cases where men who are interested in the protection of our forests took immediate action in putting out fires started by lightning and other causes, notifying us later of what they had done.

"I must also mention the splendid support given by the Okanagan Telephone Company, and the Government Telephone Service, throughout this district. Day or night, they gave us prompt and patient service.

"This splendid co-operation throughout the dangerous fire season just past was of untold value to the Forest Service."

And this from our Toronto office, under date of September 16th - "Yesterday and the day before I interviewed nine architects who had come in to see our exhibit. Three had seen our advertisement in 'Construction,' two had seen our display card at the exhibition, some had been recommended to come by other architects, and others had seen the write-up in the Trade journals. All were much impressed with the exhibit.

"I attended the luncheon of the Ontario Association of Architects last Wednesday, which ended in a discussion of B. C. products.

"The laying of the corner-stone of the City of Toronto's new Nurses' Home ended the same way. Major McGuire was much interested in the splendid Douglas Fir joists and spoke of them from the platform. Three cars of excellent ten and twelve-inch joists were on the job, and the architects were delighted with them. There is a lot of enquiry about our woods and methods of finishing them. Some days the office resembles a trade school!"

We notice an excellent article in the "Canadian National Railways Magazine" on 'The Forests of British Columbia.' This was compiled largely from information supplied to the writer of the article by our Toronto Office.

PERSONAL PARS

In our August number we intimated that Mr. H. P. Hart (late Supervisor in the Vancouver district) had been compelled through ill-health to seek other employment. It gives us much pleasure to quote the following paragraph from his letter of Sept. 18th - "Will you please express to the boys of the Branch (either through the medium of ROOT AND BRANCH or otherwise) my deep regret that circumstances compel me to leave the finest bunch of fellows I have ever been associated with."

Mr. Hart concludes by wishing the Branch every success in the future. We regret sincerely the circumstances which have removed his genial presence from amongst us, and we assure him that his kindly sentiments and good wishes for the future are most heartily reciprocated.

Ranger T. H. Wilkinson succeeds to the vacancy created by Supervisor Hart's retiring. Ranger Wilkinson holds a class 'A' Certificate, and the manner in which he has administered his district in the past leads us to believe that he will be equally successful in his new position, with its greater responsibilities.

His many friends in the Service will be gratified to learn that Mr. C. B. Peterson, our Assistant Deputy Minister, has been elected President of the local Branch of the Civil Service Association. We are fully conscious of the signal honour which has been conferred upon one of our number, but we feel, too, that the Association will have no occasion to regret their choice. Mr. Peterson will bring to the deliberations of the local body a keen incisive mind, a calmly judicial attitude, and a sane and balanced judgment - in other words, a 'levelheadedness' - which cannot fail to exert a very wholesome influence.

Congratulations are extended to Inspector Blake on his being admitted to membership of the Association of Prof. Engineers of B. C. To be a member of that august body is a distinction sought by many; but the path is steep and the gateway narrow, and membership is still a real distinction. Mr. Blake, we understand, gained ninety-eight percent at the examination set by the Board.

Mr. G. V. G. Myers has resigned his position as Station Mechanic at Thurston Bay, and has been succeeded by Mr. H. S. Atkins. Mr. Myers was a thoroughly capable mechanic and his successor must be no less, but we believe that Mr Atkins is the right man.

We extend the hand of fellowship and welcome to S. E. Marling, Junior Forester, who succeeds to the vacancy created by T. A. Clarke's transfer from Headquarters to Prince Rupert. Marling is not altogether a stranger, having been employed on reconnaissance work in the summers of 1920 and 1921, when his work created a very favourable impression. He has just graduated from the University of Washington and has been assigned, for the time being, to the Prince George District.

Mr. S. C. Gaines has resigned his position in the office of the District Forester at Vancouver, and has been succeeded by C. L. Costello. Costello, like his predecessor, is a member of the Amputation Club. We bid him welcome and are glad to have him with us.

Maybe we are taking a mean advantage in publishing this correspondence, since it was not intended for our eyes - Clem having, in a moment of mental aberration, thrust it into our envelope instead of into Ranger Eden's. But, oh, how it rejoiced our hidebound souls! Seriously, though - and let this absolve us with Clem and Roy - the correspondence shows a spirit of genial camaraderie between the Field Staff and the Office Staff in that district which might be more generally prevalent.

"Mr. Morgan, Williams Lake vicinity - Lest we forget, please send me the following supplies - along with any stray cheques you might want to get rid of - as I have missed my monthly tour to the District Office and am running short of most everything that usually I pick up when nobody is looking! I might add that I have a hell of a cold. I know there's only one cure but don't seem to find the right company in which to proceed. However, the Fire Season is drawing to a close. Nothing much doing here, but we are away on Monday. Saw last night, he was on his way to Winnipeg, and I hear is leaving too, so the B. 4 will be well scattered soon. We hope to see them back some day.- Pins; Paper clips (the small-funny ones); Carbon paper; Big envelopes; Pencils; Final Fire Reports; 201 Forms; Diaries. Thank you. R. Eden."

(The reply) - "The blokes at Victoria don't seem to want to send any pencils. If this is not enough stuff, holler and we'll send some more up by George. Damn sorry that poor old got laid off. Raining to beat fury down here. So long. I thank you. Clem."

FIRES WE HAVE "FIT."

"I had one fire this summer in which, although it was not fought so far as we were concerned, a considerable few people were interested. When I arrived I found it more or less out of control and burning in some very scrub jack-pine; but the only chance of any material damage lay in the wind's shifting, when a big mining property nearby would be in danger. This was a case where the Company had to protect their own property, and I had not been in the locality very long when the Company's Attorney arrived. He appeared to be somewhat excited, but was quite emphatic that he did not want to take any active part in the fire-fighting. He was very anxious that I should take charge of the arrangements for protecting the mine and said that he had wired to NEW YORK for funds to pay the fire-fighters. I informed him that I would do all I possibly could to help protect the property. Several days passed, and the fire still smoldered but made only very slow progress. Then the funds arrived and I was instructed to proceed with full command to the extent of the funds. By this time, however, the mine was out of danger. It's not often that a fire will wait five days till the funds arrive wherewith to fight it, but this one did, so all's well that ends well. I got the promise of a box of cigars, what my friend the Attorney got is no concern of mine, and the man who caused the fire got fined \$10.00 and costs; so everybody got something." R.B.E.

"Each year's fire season is a depressing period, bringing heavy strains, physical, mental and moral, and resulting in huge losses to the timber and other wealth of our Province, as well as vast expenditures of hard cash for fire-fighting. But even as black a cloud as this may have its lighter side, as witness the following fires which occurred in the Vernon district --

"Garbage from a town was tipped over a ledge into a ravine. Fire started in the rubbish from 'spontaneous combustion' (or from hot ashes) spread rapidly in dry grass, and was fought by the unfortunate Ranger amid indescribable sights and smells.

"A blind man, smoking while weeding his garden, dropped his pipe and lost it, which accounted for another fire.

"Two small boys started a fire, smoking out a ground-hog. A young person lit a fire on a grassy hillside to burn out an ant-hill. Some boys swimming in the Tulameen River lit fires on the bank for warmth.

"An isolated cabin was found in one burn, containing the wreck of a mysterious apparatus. Fire may have been accidental, or it may have been set by the manufacturer to destroy the evidence of his moonshining activities.

"The hotel in a hamlet caught fire, supposedly from the kitchen range, and fire spread. The neighbours volunteered and

fought fire without pay in intolerably hot, dry weather. The only salvage from the burning hotel was a quantity (several barrels) of good quality but perfectly illegal beer. A zealous Constable appeared from nowhere and promptly took possession of it, and trucked it away to safety, right under the eyes of the suffering fire-fighters. There are moments when the English language proves entirely inadequate."

"To make a long story short" - submit it to the Editor.

"Now that the danger from forest fires is practically over," writes Mr. A. Philip, of Rainbow Lodge, Alta Lake, "I feel that words of praise are due to the Forest Branch for their excellent work throughout the Province. The Forest Branch, in my opinion, has reached a point of efficiency never before attained in the history of the Province. I wish to speak particularly of the good work done by the Forest Ranger in this district - in him you have a man who does not look on his position as a mere 'job,' but one whose heart and soul are in his work. Your fire signs and placards have borne fruit, as evidenced by the care exercised by the city dweller in extinguishing the discarded match or cigarette. The metal signs are the best yet. Let the good work continue!"

"Did he hit you in the pool-room or in the backyard?" asked the prosecutor of the complaining witness, a Swede named Nelson. "Val, ay say he hit me in the eye," said the Swede. "Yes, I know, but what position were you in when you were hit?" "Ay ain't got no position, nor no job either." "I don't care whether you have or not - I want to know whether it was inside or outside you were struck." "Val, outside, of course." "But outside of what?" "Outside of me." The lawyer grew desperate. "Now, listen to me - Where were you when he struck you?" The Swede buried himself in deep thought; the Court waited patiently and a pin dropping would have sounded like an explosion. Nelson looked at the prosecuting attorney and slowly said: "Val, ay was on my back."

We heard the other day of a man who married a widow named Elizabeth, with two children of her own. In other words, he acquired a second-hand Lizzie and two runabouts.

"HOWLERS" - An examination held recently for Rangers produced the following -

(Q) Give details of organization of fire crew on a 50-acre fire, etc.

After dividing a crew of fifty men in various proportions, the candidate displays cannibalistic tendencies and states - "This uses up forty-six men and leaves me four for a food supply."

(Q) Estimate loss of second growth -
Candidate states that in his opinion "It would be a total loss."

(Q) How would you estimate damage to burned timber?

"Take a small piece and examine it carefully."

If you can suggest a better address to which to forward your copy of "ROOT AND BRANCH", please let us have it and we will embody it in our mailing list.

Dear Mr. Editor - If a file, in a rasping tone, should call an auger a bore - and a monkey wrench a nut from a vice - would a jack-plane smooth things o'er? An answer will oblige,

Yours,

Mechanic.

(Why axe me? Ed.)

A certain man died and his wife had for him a church funeral. The minister told what a great and good man he had been; the reverend gentleman was so eulogistic that the widow finally turned to her little boy and said: "Danny, is there any other corpse in the church beside your father?"

From Vancouver: "Talk of the high cost of living! The only thing that is coming down is the rain and even that soaks you!"