If Forests are to be Saved, Aeroplanes must Play Big Part

A business man's conclusions following a personal investigation of the value of flying.

By Edward Beck, Manager of the Canadian Pulp and Paper Association.

(EDITOR'S NOTE:—Mr. Beck recently made an aerial reconnoitre of portions of the St. Maurice Valley, Quebec, in a Curtis flying boat under the guidance of Forester-Photographer Townsend, of the Laurentide Company, Limited. The seaplane, driven by Pilot Wilshire, is owned by the Laurentide Air Services and employed during the summer in patrolling the St. Maurice Valley to detect fires and to make photographic surveys of the Laurentide Company's timber resources. The trip took in the entire region between Lac La Tortue and Lake Clear, the day being especially advantageous from a flying standpoint.)

OMPETENT authorities estimate that 5 to 10 per cent. of the forests in the St. Maurice Valley have been damaged by fire this season, which has been one of the most disastrous ever experienced in that region."

"While the statement as to the size of the fire-swept area does not mean that 5 to 10% of the standing timber in the valley has been destroyed, since there is usually a good deal of timber that can be salvaged after every fire, the actual loss is still very considerable, while the potential loss—the destruction of young forests first getting their stride—is still more serious."

"The fires, are not confined to the limits of any single company. Practically all those owning or operating limits in the St. Maurice Valley are among the sufferers, some to a greater extent than others. greatest damage seems to have been done in the Chinne Lakes and Vermillon River districts, the newlyburnt areas in these districts covering thousands of acres in extent and presenting a bleak and gaunt appearance to the observer from the air. These are not the only places visited by fire this summer, however, as the Upper St. Maurice has been the scene of more than a score of disastrous burnings.

"An official statement given out at Quebec, places the monetary value of the timber destroyed by fire already this year at something like six millions of dollars, being the equivalent of the growth of 600,000 acres. Even these impressive figures fail to bring home the full extent of the disaster, which can only be appreciated by those in intimate touch with the situation or who are responsible for the carrying on of the industries whose existence depends upon a continuous and abundant supply of wood. The recent rainy season has

brought a temporary respite from the scourge of fire, but no one knows how soon this may give way to another period of drought and a new time of peril.

Protection Inadequate

"Opinions differ as to the origin of this year's fires, but everybody agrees that the present protective means are altogether inadequate. The railways and the settlers, according to those nearest the scene, have started fewer fires this year than formerly. Irresponsible hunters and fishermen are held to blame in many cases, while deliberate incendiarism is also charged in some.

"The newly promulgated regulations of the Department of Lands and Forests are expected to be of benefit in preventing fires if conscientiously enforced during the hazardous seasons, but practical foresters do not look upon them as at all

"Experience has brought the conclusion that the only way to safeguard the Quebec forests from destruction by fire is an adequate system of aerial surveillance supported by a sufficient number of fire rangers' camps situated at proper intervals in the woods.

"The aerial observer has immense advantages over all others. He can detect a fire at a range of from fifty to sixty miles and can reach it in as many minutes as it would take hours, if not days, by any other mode of conveyance. He has the advantage of being able to circumnavigate the threatened area, discovering instantaneously the fire's direction and locating its most vulnerable approach. Fire rangers on foot or in canoes can see but a small section of a fire at one time. They experience great difficulty in learning its direction. Frequently their efforts, undirected, are rendered futile on this account. Absence of trails hampers their ingress and egress and renders their progress slow and ineffectual, so that as a rule, the rangers' crew approaches its task half-heartedly, overwhelmed by the obstacles opposed to its work.

"In co-operation with fire-fighting camps established at distances of a hundred miles or so apart, manned with crews of from six to eight men, available at any time to respond to an alarm equipped with suitable fire-fighting apparatus, a sea-plane, such as those now in use, (although better machines for the purpose are available), could spot a fire, fly to the nearest camp, return with the men and put them at work before the blaze got well under way, it is claimed. Many fires which might otherwise prove destructive could thus be extinguished in their incipient stages, while others could be kept within relatively restricted areas.

Camps Self-Paying

"These camps would not be necessary except during the particus larly hazardous seasons which occur in the months of May, June and September. Operated in connection with seaplanes they would, in the opinion of those best fitted to judge, reduce the fire hazards in the Quebec forests to a minimum and pay for their cost many times over every season. In the long run, it is claimed, they would be less expensive even than an adequate system of observation towers and telephones, which are impracticable so far as the St. Maurice Valley is concerned, and infinitely more effective. They offer, in fact, the only real solution of the forest problem as it exists in this

"The two 'planes in use in the district this summer have given a good account of themselves, having de-