

# Prize Essay in Barnjum Contest

**P**RIZES have been awarded by Mr. Frank J. D. Barnjum in the Prize Essay Contest on Practical Forestry as follows:—

First prize: \$500 to P. Swanson, Timmins, Ont.

Second prize: \$250 to M. Currie, Grand Mira South, Cape Breton.

Third prize: \$150 to Donald C. Oxley, Annidale, Queens County, N. B.

Fourth prize: \$100 to R. M. Brown, Pincher Creek, Alberta.

Mr. Swanson's essay is to be printed in two instalments in this magazine. The first instalment follows:—

No question faces Canada today of such national importance as the question of Conservation and Preservation of Natural Resources. The best minds of the Dominion should be fastened upon it. Men of vision and courage are already speaking with a frankness that is reassuring; these are the men the Dominion needs—men who through wide experience and sound judgment, foreseeing the future, have the courage to speak and act in the present. Especially are such men needed in dealing with the problem of forest protection. It can be said with a certainty that forbids dispute that, unless the leaders of our nation act with both vision and courage, the forests of Canada will be as a tale that is told.

When we remember that the industrial life of Canada depends to an unique degree on our forest wealth, is it any wonder that the far-seeing men are crying for urgent protective measures to be taken? With the complete depletion of our timber lands, it takes no imagination to calculate the consequent detrimental effects on many of our greatest industries, e.g., lumbering, shipbuilding, mining (underground timbering), the saw-mill, the pulp and paper mills; factories engaged in the production of equipment of the above industries, transportation, both rail and sea. In short, the industrial life of this country would collapse. Forest Protection and Preservation is a question of paramount importance; it is the greatest economic problem facing this young country.

Nowhere are the facts so startlingly arresting. A few will suffice. Canada possesses today 1,900,000 square miles of soil covered with forest, roughly one billion acres, yet in the past seventy-two years, the life-time of one generation, two-thirds to three-fourths of our timber wealth has been destroyed by fire; in other words, 1,000,000 square miles has been denuded of its standing timber. What does that mean? A child can answer the question—and fire is only one agent of forest destruction!

Another fact: East of Cochrane along the Transcontinental to La Tuque less than 1,000,000 cords have been cut and hauled to the rail. Yet 20,000,000 cords of wood have been destroyed by fire! Is forest-fire a great menace? Do we need more adequate forest protection from fire?

Right here, bear in mind that the appalling loss caused by a fire through virgin forest is not the only loss suffered through fire. This fire-swept area becomes a fertile field for another fire. The fact is indisputable that repeated fires over the same area are most prevalent. Witness the Cumberland area in Nova Scotia, the Miramichi in New Brunswick, and the Porcupine in New Ontario. What are the results of the repeated fires? These: the remaining seed trees are wiped out and all



Drawing for and presented to the Cause of Forest Fire Prevention  
By F. H. Ellis (late R.A.F.)

thrifty young growth is destroyed. The truth is that the repeat fire is as disastrous as the original fire. Another fact: during the fall and winter of 1920 and 1921, freight on a cord of pulpwood from points along the T. & N. O. and the Transcontinental in northern Ontario to pulp-mills in the United States was \$16.00; the price paid for this cord, cut and hauled to the rails, ranged from \$14.00 to \$20. This for wood as small as 2½ inches in diameter. Were the pulp magnates of the United States eager to get our fee land wood? Is forest fire the only danger threatening our timber supply? Again: with the exception of two large companies the larger mills of the United States have an adequate supply of pulp from *their own timber lands* for only a very few years. United States pulp mills use 5,500,000 cords of wood each year! Where are they going to get their future supply? Do Canadian forests and Canadian industries need protection from fire alone? Will they need it more in the future? Yet another fact: In one timber limit in the Province of New Brunswick, 65% of the standing timber was destroyed by the spruce bud-worm. This is the insect that destroyed 50% of the spruce and fir stand of Maine. It is making head-way in Northeastern Quebec, where it is followed by the black beetle which attacks the balsam fir. The bud-worm is only one of many parasitic pests, and there is still left other agencies, e.g., the wind which causes tremendous loss—and people think that more forest protection is the mania of a few!

The truth is—let us be frank—that logging operations conducted each year throughout the Dominion is a direct attack on the capital wealth of our forest herit-