About 1845 vast areas were burned over west of lake Superior, many of them still remaining bare of tree growth. Some years later a very extensive fire burned along the height-of-land from lake Timiskaming to Michipicoten, and in 1871 another large fire swept over an area of more than 2,000 square miles along the north shore of lake Superior from lake Nipissing to Port Arthur, completing a chain of desolation across the northern part of the province. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. Two other fires in 1891 and 1896 devastated over 2,000 square miles of country in the southern Algoma district. In Quebec again, the country along the line of the Quebec and Lake St. John railway also suffered by a number of disastrous forest fires, while millions of dollars worth of timber in the Ottawa country also fell a prey to the devouring element.

During more recent times, a series of disastrous fires swept over Northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at $3,000,000. In 1916, fires in the same general region were responsible for the deaths of at least 224 people, the exact number never having been determined. During 1922, a third fire, covering in part the areas burned over by the previous fires, destroyed the town of Haileybury and other centres and caused 40 deaths. In 1908, a fire originating in the forest around Fernie, British Columbia, destroyed that city, caused 25 deaths, rendered 6,000 people homeless and damaged property to the estimated extent of $5,000,000. These are a few of the outstanding historical disasters. Every year thousands of acres are covered by fires of less individual importance, but which in the aggregate are rapidly depleting our forest resources. During the last five years 723,250 acres of merchantable timber have been burned over annually. At the low estimate of 5,000 feet board measure per acre, the amount of timber destroyed annually would be 3,616,250,000 feet board measure. In addition there were over 800,000 acres of young growth and 500,000 acres of cut-over land burned over, on which the increment of perhaps 30 years, on the average, was destroyed.

Speaking generally, there are two annual periods in Canada when the forest fire hazard is highest—in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the green growth is dead and the ground is covered with dry leaves. Statistics collected by the different government administrations and the Quebec protective associations show that over 95 p.c. of the fires of known origin are due to human carelessness and therefore preventable. Campers, settlers and railways are responsible for most of the fires whose origin is determined. Other causes, including lumbering operations and incendiarism, account for small proportions, and only a few are attributed to lightning.

Losses through Insects and Fungi.—From 1912 to 1923 the spruce budworm caused tremendous damage to the spruce and balsam fir forests in eastern Canada. In Quebec, it was estimated that 100 million cords of pulpwood were destroyed by this insect, and in New Brunswick the loss was placed at 15 million cords. The active stage of the infestation is now practically over. Other insects, though not as destructive as this one, entail a heavy drain on the forest. While the attacks of fungi are more insidious, the loss caused by the various forms of rot and other fungous diseases is probably not less than that caused by insects