Perhaps the most effective means of controlling destructive forest insects is by the introduction of parasites. The Division of Entomology has developed this means of attack with marked success in the case of the larch saw-fly and has recently secured from Europe some millions of parasitic insects which are being liberated in the forests infested with the spruce saw-fly. The loss caused by blister rust, the various forms of rot and other fungous diseases, is probably not less than that caused by insects under normal conditions. The butt rot is especially prevalent in balsam fir, and the value of the hardwoods is also greatly decreased by rot.

Summary of Losses and Increment.—During the ten years 1927 to 1936, the average annual consumption of standing timber for use amounted to about 2,567,000,000 cubic feet. During this period, fire has destroyed annually about 304,000,000 cubic feet of merchantable timber and young growth of various ages estimated to be equivalent to 264,000,000 cubic feet. The destruction occasioned by insects, fungi, and windfall is not known, but is estimated at 700,000,000 cubic feet per annum. It may be safely estimated that the forests of Canada are being depleted at the rate of about 3,835,000,000 cubic feet per annum. With about 600,000 square miles of accessible timber in a growing condition, an average annual increment of 10 cubic feet per acre would be quite possible under forest management and would cover this depletion. In view of the destruction of young growth which occurs and the deterioration of the forests and the soil, caused by repeated fires, there is little hope that this increment is being produced in merchantable timber at the present time throughout Canada, although particular areas are producing greatly in excess of this quantity. Nevertheless, extensive reproduction and rate-of-growth surveys conducted by the Dominion Forest Service indicate that the increment is greater than previously estimated.