

other New England States, Pennsylvania and the mountains well on down into the Carolinas. From the first coming of the Europeans it has been menaced and in many ways:

1. Vast areas were cleared for agricultural purposes; most of these areas will always be devoted to food production, but we now realize that lands of no inconsiderable proportion are unsuited for such purposes and that the removal of the forest was a mistake, and so we discover in the majority of cases the reason for the abandoned farms and fields to be found in all parts of the white pine area, and not alone in New England and the Trent watershed of Ontario; the problem of reforesting these sections has been confronting us for many years and is now more acute than ever.

2. Prodigality on the part of the early settlers and of their descendants. They and we have looked upon our pine as on our wild game and other natural wealth, as something that could be destroyed, often without rhyme or reason, often for very temporary gain, without regard to the future—happily we are coming to a more reasoning attitude, but necessity may be given some credit for that.

3. Unscientific methods of lumbering, which includes waste—often criminal in extent, disregard of provision for the natural restoration of the forest and failure to dispose of the slash, leaving it as the almost certain starting point of fires and as a nursery for various destructive fungi.

The Toll of Fire

4. Fire has been from the first and still continues to be much to our shame and our countless loss—the agent most destructive of our pine and other forest wealth. It has been and continues to be a veritable demon of destruction in spite of the fact that it could be largely controlled. It is said that “through fire waste alone more timber had been destroyed in the Dominion than had been felled by the woods-

man's axe for ordinary commercial purposes.” “This is nothing short of appalling when we take into account the fact that the primary forest products of the country have a value of approximately \$175,000,000 annually, and the output is being imperiled through a waste that is largely preventable.” In this connection Senator Edwards has declared that “it will be only a few years when lumbering will be so reduced that, excepting west of the Rocky Mountains, it will be a very small industry indeed in Canada.” It is also affirmed that “white pine, which was long the leading commercial tree of Canadian forests, is supplying less lumber than it did five years ago by over forty per cent., while its proportion to the total cut of all kinds is only about one-fifth.”

Timber-destroying Fungi.

5. These have always been at work but never so destructively, proportionately at least, as now, for the stronger trees have been removed, slash has accumulated, and fire has made open scars which make their access sure and easy. With the diminished stock left, the losses from this source become constantly more significant. If anyone doubts this statement he has but to examine any run of logs and note the number that are defective. Little attention has been paid to this matter because there have been enough good trees to supply the demand; but this factor must receive attention, for the effect of removing the strong and healthy from the forest, leaving the weakened members is certain to produce much the same effect in the forest as in human society.

The Blister Rust of the Pine

6. The blister rust is a new comer from Europe and a very real menace—one that may render nugatory our efforts at reforestation with white pine, one that may spread with disastrous results to some of our most highly-valued western pines and one that may in time render futile the efforts we are making to preserve our white pine from des-