The holdings of the present operators are almost invariably heavily bonded, in some cases, as much as two dollars for every thousand feet of standing timber. As a consequence, it is necessary for the manufacturer to cut his timber in order to pay the interest on these bonds, which is usually from 5 to 7 per cent. One of the effects of this situation is that many companies are actually compelled to leave on the ground to decay as much as two thousand board feet per acre in tops and logs partially affected with red heart, because there is no profit in manufacturing low grades into lumber. The tendency is to haul to the mills only such portions of the trees as will make high grade material. The lumbermen believe that they are not in the position to consider conservative methods of logging or to look forward to a future cut of timber on the same land.

The above facts are commented on not only for the purpose of showing one of the causes of economic waste, but to meet the oft-repeated statement by the lumbermen, that if his tax were less, he would not produce so rapidly nor waste so recklessly, and that as a consequence the taxable values in timber would be left standing for a much longer time.

We will not permit ourselves to be deluded into the belief that the present reckless exploiting of the timber resources would be in any measure retarded by a reduction in taxation in view of the fact that the fixed charges on the investment must be met, and that these are far and away larger and more important in the eye of the lumbermen than the tax charge.

It seems inevitable that the reckless exploitation must continue as long as there is sufficient virgin timber to keep in operation the extensive establishments of the present time. The lumbermen, however, are not without responsibility to the people of the State. They have obtained their lands at low prices and have made fortunes from the increase in the value of the stumpage. Through their operations the pine timber, which is the chief asset of the region in which they operate, is being removed, and the land usually left in a desolate condition. The industry does not develop the country permanently, and the earnings are seldom invested where they are of any benefit to the community. Local residents, attracted by work which furnishes them with regular wages, leave the farm for the mills, and when the mills are abandoned they are too often not satisfied to return to the

farm work, but follow the mills to other sections not yet exploited.

Nevertheless, a great deal of this cut-over land is fine for agricultural purposes, and when the proposition is made to reforest, especially when made to the private owner, he answers that he cannot afford to grow any trees on land which would produce as much as a half bale of cotton per acre annually, worth thirty dollars or over.

The only answer necessary to this statement is that until the lands can be put into cultivation, it ought to be put to some profitable use, and the most reasonable is the growth of young timber. There should be no hindrance to the development of agricultural interests, but there is no excuse for lands lying idle, for in the future there is a chance to bring it into profitable cultivation. A young growth of pine on the entire denuded area of Louisiana, would, in no way, interfere with the development of agriculture. On the contrary, the value of such land would be greater to any prospective farmer, for he could then keep portions not timbered which he did not wish to cultivate. To make these lands produce young pine timber it is only necessary to keep out fire for a number of years after the young trees have started. No other forest problem begins to be so important as fire protection.

FOREST FIRES.

The forest fire problem is of importance chiefly on the cutover portion of the long leaf pine regions and the uplands of Northern Louisiana. In the virgin pine forests fires do little damage, unless the trees have been boxed, and there frequent recurrence prevents great conflagrations. It is on the cut-over pine lands that the injurious effects of fire call for the most careful consideration.

The seedling of any species is destroyed when not over two feet high. There are many damages besides absolute destruction which growing timber suffers from fire, but which will not be here gone into in detail. Fire also replaces pine timber by scrub oak. This is to be seen on any of the cut-over pine lands in Louisiana. This is caused by the destruction of the pine seedlings which did not sprout after being killed; whereas scrub oak sprouts from the stump after each fire and gradually en-