



Heavy Hardwood Bush, growing on rocky "soil" that never would be fit for raising wheat or potatoes or even grass.

## PASSING OF THE WOODEN AGE

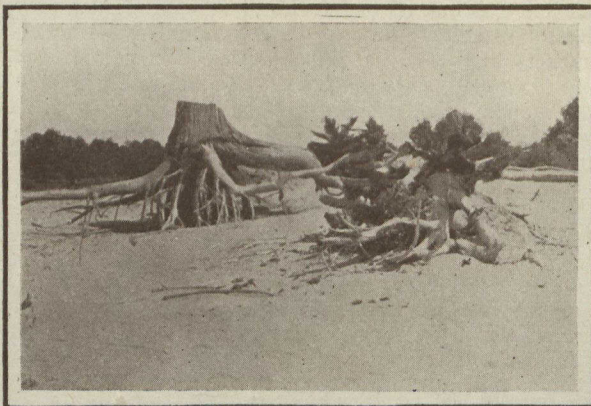
Fourth Article by A. H. D. Ross

*A Question that is Agitating a Continent which Fifty Years Ago was in the Woods.*

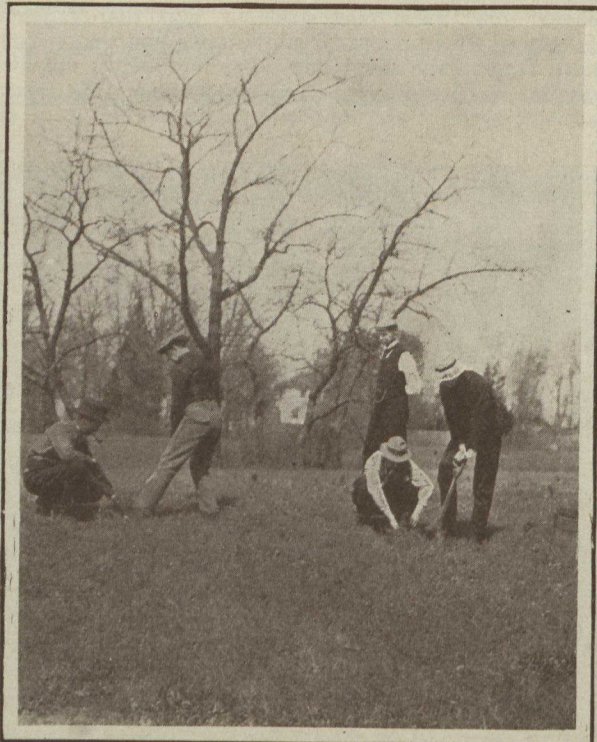
**I**N former articles we have noticed that the consumption of wood throughout the whole civilised world is greater than the normal production; that enormous areas of forest and woodland throughout Canada are annually destroyed by fire; and that there is urgent necessity for the protection of our timber, if we are to build the railroads needed for the opening up of our agricultural and mineral resources, and to provide fuel and building material for our rapidly increasing population. We also dealt at some length with the beneficial influence of forest cover upon climate, and its regulating influence upon stream flow—with particular reference to transportation and irrigation problems, and the development of electric energy for traction and industrial purposes.

In this article I wish to point out the necessity of conserving our forest resources, and to note some of the benefits to be derived from thoroughgoing systems of forest management. Wood always has been and always will be a necessity in civilised communities. In spite of such substitutes as iron, steel, brick and cement, not only the total consumption, but the average annual consumption *per capita* has been steadily rising during the last forty years. In Europe the average consumption is now 60 cubic feet per year; in Canada 230 cubic feet, or nearly four times as much. Every Canadian knows that wood prices have been rising steadily during the last twenty years. This is true of other countries as well, and it will not be long before world prices obtain. When I tell you that the consumption of wood in the leading countries of the civilised world is greater than the growth in their forests you will realise how serious the problem has become. Is it not time, then, for Canadians to consider the problem and take action ere it is too late? Our aim should be to prevent waste and to speedily adopt such systems of forest management as will ensure to future generations the necessary supplies of lumber and other forest products.

It has been well said that the standing of a nation is measured by the distance it is able to look ahead and make provision for the future prosperity of its citizens. The state being an institution for the purpose of insuring not only our present, but our future and continued welfare, must necessarily take an interest in the permanence of the natural resources upon which its welfare rests. The destruction of natural resources strikes at the very foundations of prosperity, and, sooner or later, will impoverish even the richest nations. Palestine, Sicily and Greece are examples of countries which



Sand Desert made by the wind after the forests were cut.



Planting Trees—A Slow Process.

were once the homes of teeming and prosperous populations, but which with the destruction of their forests (by reckless lumbering and fire) have become the prey of erosion by wind and water, and are to-day mere shadows of their former glory; without hope of ever materially bettering their conditions. For want of knowledge and foresight they have destroyed their soil and water. Generations still unborn must reap the fruits of their ancient folly. The point of the story for us is that Canada does not hold any special dispensation from Providence, and that a similar transgression of the laws of nature will inevitably bring the same results.

An advancing civilisation calls for more exact and scientific methods in all departments of life, and in forest administration there is no exception to this general rule. The crude present day methods of what some ill-informed people are pleased to call forestry may be likened to the agricultural efforts of our forefathers who scratched the soil with wooden ploughs and paid little attention to the future uses of the land. Like agriculture and mining, forestry has a scientific basis. When better understood it will command equal attention and be recognised as a factor that enters largely into the more important economic questions of the day. Just as our agricultural colleges and experimental farms require a large number of professional men with superior technical training to teach the principles of agriculture and investigate the new problems that are constantly coming forward for solution, and just as our mining schools and our geological survey department need highly trained specialists to show us how to develop our mineral wealth, so our forestry schools and the bureaus of forestry still to be established will be sure to employ highly trained specialists for the teaching of the principles of forestry and the investigation of its many complex problems.

The idea that scientific foresters are purely theoretical, and of little use in the community, is now pretty well exploded, and it will not be long before the science of forestry is recognised as a distinct profession, ranking equally with engineering, law, medicine and teaching. The forester does not aim to oppose Nature, but to assist her; to make use of the favourable conditions naturally existing in any given locality, and to hold in check the unfavourable ones. He exercises his skill in the selection of the most suitable species, and modifies their growth so that they will produce the most valuable timber in the shortest possible time without diminishing the value of the soil for the