Vol. XXVIII.

FOR WEEK ENDING JANUARY 28, 1909.

No. 4.

Only \$1.00 a Year

THE FOREST PROBLEM OF ONTARIO

A. H. D. Ross, M.A., M.F., Faculty of Forestry, University of Toronto

A Comprehensive Review of the Forestry Situation as it Stands to-day, with an Outline of some of the Needs of the near Fature

THE Province of Ontario has a land area of 220,508 square miles; some 72,000 square miles of which have been surveyed, of which 38,000 are sold. This leaves over 182,000 square miles of territory still under the control of the Crown; most of which belongs to what is known as the Laurentian formation-consisting of granitic rocks. On being pulverized these rocks form the well-known sands and gravels which are unsuitable for agricultural purposes but are well adapted for the growing of timber. The agricultural lands are confined mainly to the southwestern peninsula of the province, and the "Clay Belt" beyond the "Height of Land." All the rest belong to what are known as "Absolute forest Soils," and make up fully twothirds of the land area of the province.

ONTARIO'S WASTE LANDS

One of the greatest mistakes in the past has been to allow people to settle on land that was not suitable for the growing of grain crops. In some cases they located on poor farms through ignorance, but in the great majority of cases simply for sake of the timber. With the disappearance of the timber and the burning up of the vegetable portion of the soil in the process of preparing the land for the plow-the capacity of the soil to retain moisture was greatly reduced, and consequently its fertility was lessened. Furthermore, the working of light and sandy soils soon caused them to be washed to lower levels or to be drifted before the wind. In Lambton County alone, there are said to be 40,000 acres of such lands; in South Norfolk, 10,000; in Simcoe, 60,000; in Durham, 6,000, and in Northumberland, 8,000 acres.

From the Muskoka Lakes eastward to the County of Lanark there are thousands of farms upon which the people should never have been allowed to settle. After years of toil, hundreds of them had to be abandoned, and the rest yield the barest kind of a living to their owners. No greater cruelty can be imagined than to allow a poor man to settle upon poor land. The only place for a poor man is on good land, and the only way to ave it so is to first classify the land-setting aside the agricultural lands for farming purposes and retaining the non-agricultural lands for forest growth. In future it is to be hoped that such a policy will be firmly adhered to.

THE FIRE PERIL

Every man in the country should be impressed with the belief that it is an absolute crime to throw a lighted match or cigar stub upon the forest floor, to leave a camp fire burning, to burn brush close to the woods in a dry season, or in any other way of imperil valuable forest property. Prospectors have been known to fire the woods se as to facilitate the work of discovering miner-

als, and in the northern regions the Indians occasionally burn over certain tracts to make it easier to follow the game. Sparks from railway locomotives are another source of serious fires. Along the northern shore of Lake Superior hundreds of thousands of acres of timberland have been burned over since the Canadian Pacific Railway was built. The carelessness of navvies employed in the construction of railways is an-

For years we have labored under the delusion that we possessed in this fair land an inexhaustible supply of timber. That delusion is a thing of the past. The ever increasing scarcity of saw timber and the steady advance in the price of lumber have caused many to ponder this question long and well. The continued droughts of recent years with their attendant evils, with which we are all too familiar, and which may in a measure be ascribed to the ruthless deforesting that has been practised over Ontario, has brought us face to face with one of the greatest problems that this country ever had before it, namely, the conservation of our present forest areas and the replanting of other areas unsuited to other crops, in the hope of thus undoing the mischief that has been worked. The adjoining article, prepared especially for Farm and Dairy by one of the best authorities on Forestry in Ontario, is a comprehensive outline of Ontario's Forest Problem. It should be read by all.

other source of fires. In the exceedingly inflammable spruce forests of the northern part of the province the fire peril is even greater than in the southern part. Surely it is high time that war should be waged against the useless destruction and needless waste of our forest wealth. It is estimated that there are thirty-five million acres (54,687 square miles) of cut over, burned over or abandoned farm lands upon which tree growth should be retained for all time. Apart from the Forest Reserves, there are about 123,000 square miles of virgin forests and burnt over lands. If we assume that there are 13,000 square miles of muskeg, lakes and other unproductive areas we still have 110,000 square miles left-some 60,000 of which are virgin timber. The remaining 50,000 square miles consist of inferior land which has been more or less burned over within the last fifty years and is unsuitable for farming purposes. The young growth on it should be jealously guarded from fire-every tree of it as though it were

a dollar bill. If so guarded it will soon be worth many millions of dollars.

THE ENORMOUS CONSUMPTION OF TIMBER

Every year our forest areas are being steadily drawn upon for the production of dimension timber, sawn lumber, lath, shingles, cooperage stock, railroad ties, fuel, pulpwood, mine timber, fencing, telegraph and telephone poles, etc. For the upkeep of our railways alone, immense quantities of timber are required every year. By 1913 Ontario will have about 9,000 miles of track in operation. At the rate of 3,000 ties per mile, and assuming that a tie lasts seven years, this will mean the use of 4,000,000 ties a year; or the equivalent of 112,000,000 board feet of lumber. For the development of our mineral resources, too, large quantities of timber will be required. A mine producing 100,000 tons of ore per annum requires the use of nearly 2,000,000 feet, board measure, of timber. If it has to be imported the cost may be so great that it will not pay to develop low grade properties at all. Besides, large quantities of timber are exported from the province, much of it going to Manitoba and Saskatchewan, for the building of railways, houses, etc.

FOREST AND GAME RESERVES

About ten and a half million acres (16,308 square miles) of land have been set aside as Forest and Game Reserves, so as to preserve the timber upon them from fire and timber thieves, and to protect the fish and game. So far, no attempt has been made to place them under management designed to make them produce a continuous crop of timber. They include nonagricultural lands only, and the young growth upon them is being protected from fire in a fairly efficient manner.

The Temagami Forest Reserve, enclosing Lake Temagami and other lakes, has an area of 5,900 square miles, and is said to contain 4,500,000,000 feet, board measure, of standing pine. The Nipigon Reserve is a rectangular block of 7,297 square miles enclosing Lake Nipigon. The Mississaga Reserve, about forty miles east of Sault Ste. Marie, contains 2,916 square miles, and is reputed to have 3,500,000,000 feet of pine upon it. The Sibley Reserve is a small block, of about 70 square miles, situated about 16 miles east of Port Arthur; and the Eastern Reserve, in the northern part of Frontenac County, contains about 125 square miles of young growth coming in on lumbered and burned over lands. This makes a total of 16,308 square miles of Forest Reserves, proper. Besides these, there is also the Algonquin National Park, including 1,930 square miles at the headwaters of the Muskoka, Petawawa and Madawaska Rivers; forming a great stream regulator, game preserve and national playground for the people.

Mr. Cy. Warman, in an address before the Toronto Canadian Club, said: "Destroy your forests and your game will go, your rivers will dry up, your fish will die, and desolation will brood over this land that God has made so fair. Protect your forest while you have it, for when it is gone you will be utterly helpless.