

Husbanding Our Forest Resources.

In a thickly-wooded country, such as Canada and a considerable portion of the United States was when white colonists first landed on their shores, the first object of the settlers was to clear the land of the timber as fast as possible, with no thought for the preservation of any portion of it. In their eyes the timber was just an encumbrance on the soil, inasmuch as they had no other object in view than the removal of the trees to enable them to carry on the tilling of the ground.

Years have passed by, and still the same idea of indiscriminate destruction seems to hold sway in districts where the timber supply is more or less plentiful, although in the more settled parts, where timber is getting scarce, the cutting is being more carefully done, the larger trees being taken first, and the smaller allowed to grow. In the pine districts, however, everything is taken, even trees that would only make a 4x4 scantling, and even then there would be bark left on the corners. There are some exceptions to this rule, it is true, as in the spruce region of northern New York and New England, where some efforts have been made to cut the larger timber economically, preserving the smaller for future use.

In Great Britain and in some of the European countries, the conservation of the forests, with a view to getting the greatest benefits from them, receives considerable attention. The thinning out is carefully done, such trees only being removed as have reached maturity, or, for certain reasons, have to be taken out, while the replanting of fresh trees is constantly kept in view.

There is no question but that some such system should be put in force in this country in the northern and other districts where timber yet exists in considerable quantities. The general practice of lumbermen is to slash down the timber without any concern as to the future growth and preservation of forest areas. This is bad enough, but when to it there is added that dread scourge, fire, which, whether caused by locomotives, lumbermen, settlers, or hunters, does even greater damage, sweeping over the timber districts, it is evident that the supplies derivable from our forests must sooner or later fail us, if energetic steps are not taken to preserve what we have left. The number of trees cut down annually to supply wood pulp for paper alone is something enormous. It is said that to make paper for one newspaper in Paris alone 120,000 trees are required, being equivalent to an annual thinning out of 35,000 acres of timber land. If one newspaper requires so much, what an enor-

mous quantity of trees must be annually destroyed all over the world for newspaper purposes!

The Ontario Government have already taken steps to conserve the forests in northern Ontario by appointing rangers to see that the lumbermen do not destroy trees other than they are allowed to, and also to preserve the forest areas from fire. This is greatly to be commended, and we would that other governments would do the same, as well as private individuals, as far as possible.

A notable experiment in the line of private enterprise is being carried on by Mr. George W. Vanderbilt on his estate at Biltmore, North Carolina, to test whether lumber operations can be carried on so as to conserve tree growth, and, at the same time, permit of profitable cutting of logs to be converted into timber and lumber.

The scheme proposed is to crop the forests continuously, as is done in Europe, and at the same time manage the growth so as to make that possible. To this end an expert forester has been employed, who will superintend the operation with all the skill and judgment requisite to that end. The aim will be to preserve the young growth by preventing fires and excluding browsing cattle, sheep, and swine from the forest. It is assumed that by a careful preservation of the undergrowth, and thinning out of the sickly and deformed, the healthy and sturdier growths will thrive and get on much more rapidly than is usual with underbrush. In fact, the process will be much like that in the culture of fruit trees, except that leaf mulch will stand in place of plowing. By preventing fires the falling leaves will remain on the ground to conserve moisture and increase fertility. There can be no question but that this will be of great benefit to the growth in point of rapidity as well as perfection of trunks. Cutting for lumber will be done by selecting those trees most fit and merchantable. It will doubtless include the several varieties on the area, and with reference to market adaptability and profit.

This experiment is in the hands of a man of ample capital, so that there will be no need of haste or unwise expenditure of resources. Mr. Vanderbilt will not have to rush operations at inopportune times in order to meet bills and keep out of bankruptcy. He can wait on the slow processes of nature, and hold his lumber until the most favorable market conditions prevail. In seasons of weak demand he will not be obliged to slaughter his trees. He can thus get out all that is in them during a period of years. The majority of his trees will be in a growing stage, and waiting will only add to their value. If his experiment shall prove successful, it will be an object lesson for other wealthy timber owners, which