

## PRESERVING FORESTS AGAINST FIRE.

Whenever it is possible leave the trees standing in blocks. Between these blocks the land should be kept under cultivation by the plow, or pastured so closely as to prevent any grass from growing up and standing in high tufts; for such would enable the fire to run over the ground, and thus carry it from one block to another, to the destruction of their trees. The size of these blocks ought to be as small as possible; as a general rule, we would limit them to five to twenty acres, and never let one exceed fifty acres. The cultivated division between these should vary in breadth according to circumstance, to be decided upon by a government surveyor. As western winds are more generally prevalent during a dry time, when forests are most liable to be fired, the space ought to be broader between the eastern and western lines than the southern and northern. As wood and timber are cut, they should be hauled out from the woods and piled on or near the centre of these spaces, and then, in case of fire, these at least would be saved from destruction.

Before commencing lumbering in the forests, or clearing for cultivation, the tract of country subject to this ought to be surveyed, and the spaces lined out to be first cut over, and all the brush cleaned up and burned before dry weather sets in. In some instances, these spaces could be left safely to grow up a new forest, but it would be better to put them under cultivation or into grass. If suitable blocks of forest were left standing, the thinnings of these would go far to supply the country with a sufficiency of lumber. As soon as a tree here had attained a proper age and size, it might be cut down, hauled out, and turned into lumber, as is done in many of the European forests. This gives the younger trees near where they stood a chance for a better and more rapid growth, thus keeping the blocks up for a never-failing supply of wood and timber for the annual wants of the country.

Forests are set on fire by so many various ways, that neither guards nor laws, however strict, can entirely prevent them. These are mainly done by hunters, picnic parties, brush burning, sparks from locomotives, or depraved people, delighting in the wanton destruction of valuable property belonging to others. The preservation of sufficient areas of forest where now standing, and the planting of others were needed, are important considerations, not only for our own United States, but for the whole continent of North and South America. This should now be made both a state and national subject, by passing such laws, and strictly enforcing them, as shall ensure them being properly cared for; and when we have done this for our own region of the western hemisphere, let us use our influence to have the same thing accomplished, where not already done, in all other portions of the American continent.

Fire and lumbermen are annually making a shocking waste of our forests. It is fully proved now, that where reservations have been made of blocks from them by farmers, on the first settlement of their lands, the thinnings from these blocks for fire-wood, fencing, and lumber, have been more profitable to them than the crops gathered from the land entirely cleared up for cultivation; and the wooded portions of the former now are worth and would readily sell for two to five times the price per acre of the latter.

## GROWTH AND AGE OF TREES.

We are apt to underrate the possible rate of growth where a tree meets with altogether favorable conditions. The silver fir was only introduced into England in the seventeenth century by Sergeant Nowdigate; and one tree of his planting was 13 feet round when Evelyn measured it 81 years afterwards. A comparison of the statistics of growth, as above collected with reference to the oak, indicates with respect to most trees a more rapid rate than is generally supposed. Let us test the claims of some of the oldest limes. The Swiss used often to commemorate a victory by planting a lime tree, so that it may be true that the lime still in the Square of Fribourg was planted on the day of their victory over Charles the Bold at Morat in 1476. A youth, they say, bore it as a twig into

the town, and arriving breathless and exhausted from the battle had only strength to utter the word "Victory!" before he fell down dead. But this tree was only 13 feet 9 inches in 1891 (i. e., 335 years afterwards), and it would be extraordinary if a lime had not obtained in that period greater bulk than even an oak might have reached in a century. The large lime at Naustadt in Wurtemberg, mentioned by Evelyn as having its boughs supported by columns of stone, was 27 feet when he wrote (1664), and in 1837 it was 54 feet, so that within a period of 273 years it had gained as much as 27 feet. Consequently, making allowance for diminished growth, we may fairly assume that 200 years would have been more than enough for the attainment of the circumference of the first 27 feet which it had reached in the time of Evelyn. No English lime appears to have reached such dimensions as would imply a growth of more than three centuries, though the lime of Dopeham, near Norwich, which was 46 feet when Sir Thomas Browne sent his account of it to Evelyn, sufficiently dispels the legend that all limes in this country have come from two plants brought over by Sir John Spelman, who introduced the manufacture of paper into England from Germany, and to whom Queen Elizabeth granted the manor of Portbridge.—*Scottish American*.

## Spruce and Hemlock.

The Chicago Northwestern Lumberman says: The eastern spruce trade is in a healthy condition. When the combination of spruce lumber manufacturers was formed some time ago there was no faith in the eastern markets that it would amount to anything. Some of the members of the organization cut prices as of old, but in order, seemingly, to make them stand up to their word, Providence stepped in and shut off the rainfall. There has not been water enough to float logs to any advantage and not enough to run the water-power mills. The result is that the production is greatly diminished, and prices are fairly sustained. Had it not been for this assistance which nature rendered there is no knowing how low values would have dropped. The pine lumber manufacturers of the Northwest may draw a lesson from this if they see fit. The markets will go into the winter with only moderately sized stocks of spruce on hand; the mills will have nothing to speak of in pile, and consequently the outlook for the coming year is brighter than it would otherwise be.

There is a good demand for hemlock in Pennsylvania at a reduction, in most markets, of \$1 per thousand from last year's prices. The cut of the hemlock mills is increasing, but there is little prospect that the production will become burdensome, for with the difference in the price of pine and hemlock the people in the East find it to their interests to use the latter wherever practicable.

T. SHEPPARD, the manager of the Rainy Lake Lumber Company, at Port Francis, Man., says, the company has rafted at present enough red and white pine logs to make 18,000,000 feet of lumber. Owing to the recent destruction of the company's Rat Portage mill very little of the amount will be cut this season. There is some white oak in the Rainy Lake region, but the birch, maple and other varieties are usually of poor quality. The land of the Rainy Lake region is of a rich sandy loam, with clay subsoil, and is easily cleared of timber. There has been an important agricultural effort in that region this year, and there is a good local demand for farm products. Port Francis is a town of about 50 houses, and is mainly maintained by the Rainy Lake Lumber company and the Hudson Bay company.

## Falling Leaves.

"There is something inexpressibly touching in the fallen leaves," sighs an esteemed author. There is, there is, indeed. It's when you slip on one of the articles on a wet morning, and touch the unsympathetic pavement. But there is in reality touching language—language uttered from the heart, yes, from the depths of the soul, in the many thousands of testimonials and letters (unsolicited) that come from those who once were sufferers from lung disease, asthma and consumption, and who have used N. H. Down's Vegetable Balsamic Elixir, and have been restored to their wonted health and activity.



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