

is rapidly producing the same result: the unsparing ax is busily engaged in its work of destruction, settlers seeming eager to get rid of the wood at soon as possible, and valuing their farms in proportion to the number of acres cleared. Consequently the same result may be expected as at the East, and the next generation will probably witness the same scarcity of timber and the same baneful effects from its absence that are now felt in other portions of the country.

As for the vast region stretching from the Mississippi, or even the Wabash, to the Rocky Mountains, it is well known that immense tracts are entirely destitute of trees, and it is perhaps safe to say that less than one tenth of the whole district is timbered land.

Aside from the intrinsic value of wood and timber for the purposes of domestic economy, some interesting considerations arise from this improvident destruction of the treasure lavished upon the eastern portion of the continent by the hand of Nature.

It will hardly be denied that sterility, or at least a great depreciation of the soil, has followed the total destruction of timber wherever it has occurred on a large scale, in connection with tillage, particularly of those countries situated south of the 40th parallel of latitude—S. r a, Persia, the North Coast of Africa, Spain, once fertile countries, according to history—might be adduced as instances.

A little reflection will convince us that a total destruction of woods and forests could hardly lead to any other result: water is an element that is absolutely indispensable to vegetable life. It is always within the power of man, by proper drainage and deep cultivation, to correct the effects of superabundant moisture; but rarely can he supply the want of it by artificial irrigation, except in a very unequal manner, far inferior to that afforded by the clouds, those great natural reservoirs, or by watering; a very laborious process, necessarily confined to small patches of ground.

Now it is well known that woods have the property of attracting electricity and of making clouds discharge their contents, particularly where they exist on elevated lands. Trees, by their shade and the leaves they deposit on the soil, prevent the action of the sun from drying the soil too rapidly, and the moisture is retained to be given slowly and beneficially to the adjoining lands. But this is only a part of the valuable agency of trees in agriculture; they act as natural wind-breakers, moderating its violence to a surprising degree, and preventing its carrying off the moisture of the earth.

In those parts of our country—Fond du Lac—which are timbered, winter wheat is an almost certain crop; not from the superiority of the soil over that of the prairies—for the latter are equally fertile—but simply from the protection afforded against the wind by the surround n

woods; the snow remaining a long time on the ground to protect the plants, and the soil retaining sufficient moisture to bring them forward till the heavy matures, even in the driest seasons; whereas, on the prairie, no such protection exists: the snow that falls upon the ground is partly drifted to the woods, and the remainder rapidly disappears under the combined action of the sun and of winds that meet with no obstacle, and consequently sweep over the land with unchecked violence, drying up the soil and withering the plant. For this reason, it may be said that the cultivation of winter grains is entirely abandoned on the prairie, in this section at least, as experience has proved it to be unprofitable.

The same effect is produced, although in a more subdued degree with regard to spring crops; a dry season invariably affecting the open grounds of the prairie more injuriously than the timbered or the "cak openings;" for the obvious reason that on very open lands the winds carry off the moisture much more rapidly than on those places which are comparatively sheltered.

In mountainous or even hilly countries, the total destruction of timber is attended with the most lamentable results. Mountains receive far more water and snow from the clouds than the lowlands, and when their flanks are entirely denuded of the forests, which a beneficent Nature almost invariably plants there, the torrents produced by showers and melting snow meeting no longer with the powerful obstacles presented by the roots of trees, tear the sides of the mountains; deep ravines and landslides occur; and the floods, instead of depositing enriching alluvial matter in the valleys, roll upon them masses of gravel and sand which destroy their fertility; thus causing a two-fold mischief, viz; washing the mountain-side down to its primitive formation, where only a stunted vegetation can afterward subsist, and covering the rich lowlands of the valley with barren soil, besides filling the navigable channels of rivers with sand-bars.

The wonderful adaptation of the works of nature to the wants of man is strongly exhibited with regard to the vast prairies of Illinois, Wisconsin, Missouri, Iowa, which are so destitute of fencing and building timber; and yet, by their climate and the fertility of their soil, are capable of maintaining a dense population. The Upper Mississippi, and many of its tributaries, by which those states are watered, mostly take their source in Minnesota and Northern Wisconsin, in a country covered with dense forests of pine which are pronounced by most of those who have visited them, to be inexhaustible; so that everything is ready for the benefit of man: the easily tilled prairies to supply the lumberman with food, the lumber to supply the prairie farmers with building and fencing materials, and