

*Virginiana*), and White Oak (*Quercus alba*) in the principal portions of these provinces.

The same causes, which prevent the range westward beyond Red River of many of the eastern trees, equally prevail in restricting the eastward range of the British Columbia trees beyond the influence of the Rocky Mountains. Allusion has already been made to the peculiar physical features of that Province, its somewhat generally moist climate and its distinctive forest flora. The barriers to eastward distribution are not merely the great mountain ranges and the climatic effects which they produce, for the Douglas Fir (*Pseudotsuga Douglasii*) and the Western Scrub Pine (*Pinus contorta*), for instance, both cross the Rocky Mountains and are found beyond their flanks on the eastern side. The different atmosphere met with, when the clear open prairie is reached, and the continued exposure there to dry sweeping winds, form further obstacles to the spread to these trees. It does not appear probable that the prairie soil has much to do with the question, as, so far as limited experiments afford any proof, eastern trees at least will readily grow on our prairies when properly cared for and protected from fires and winds. In fact, to make Manitoba and the land westward a successful country for the growth of many fruits, it will only be necessary to create effective wind-breaks around the orchards.

### III. THE CREATION OF FORESTS.

The comparative absence of trees upon the prairies has such marked results in the rapidity with which the water is both evaporated and drained from the surface of the whole country, that the creation and preservation of forests, at least around the sources of the larger streams, has become a matter of national concern. These forests would form reservoirs, in which the water would become more frequently accumulated, and more gradually drawn off by rivulets and brooks into the main stream, and thus maintain a more constant and uniform supply. Trees should also be planted not only along the brooks and rivulets, but even along the larger streams. These fringing the banks would limit evaporation, by protecting the streams from drying winds, as well as by shading them in part from the sun. The sources of every