

Once established, growth would be most rapid. In about fifteen years the plantations would be at least as many feet high.

The drifting snow would be caught by the trees and remain there to gradually melt with the heat of spring. The ground, being then soft, a plentiful supply of moisture would sink into the soil for the use of the trees.

The falling needles and forest mosses would soon absorb and retain large quantities of water. The surplus would run off and help to vivify the grass of the prairie all round the plantations. In fact, it would just be on a great scale what is to be seen in every coulee and scrub patch in the country, the snow would be retained till the ground was soft enough to absorb it. This indeed seems to be the trouble with the so-called semi-arid regions of southern Alberta and Assiniboia. Plenty of moisture falls in the form of snow, but the Chinooks melt it while the ground is frozen. It cannot enter the soil and so it finds its way at last to the rivers, or lies in shallow pools on the surface to be dried up by the first few days of real warm weather.

And another effect the afforestation would also probably bring about. Forests, as is well known, collect moisture from the air, and many additional springs would probably be formed around the woods, a matter of considerable importance, when perhaps for miles no water is available for the cattle except may be a small alkali-impregnated lake.

And yet another benign effect might result. The retention and subsequent gradual evaporation of increased quantities of water in the district would cause an increase of moisture in the atmosphere, and possibly also an increased rainfall as a result of that; and who can estimate the value of such a blessing to the sun-baked plains of the west. Even this alone would warrant the adoption of this, or some other such scheme as I have here indicated. The experiment, if conducted on a sufficiently comprehensive scale would be a magnificent one, and its execution would be well worthy of the intelligence and enterprise of the people of Canada.

It is not, of course, intended that this paper should indicate in any arbitrary fashion the course to be followed in this matter. It is simply intended to draw attention to what is felt to be a real need in the country, and to point out briefly the general lines on which it may be met. Some such scheme will be of infinite benefit, and in the coming Forest Department of Canada the partial afforestation of this section of the North-west in something akin to the manner indicated will deserve a most worthy place.

Dr. SAUNDERS.—The results of our experiments with the Austrian pine at the Experimental Farms show that there has been no success with them in the West, nor have the hardwoods been successful. The native trees are most satisfactory, especially the Manitoba maple. At the Indian Head Farm we have 120,000 trees, 110,000 of the native maple and the others chiefly elm and ash. They must be grown from seed ripened in that country, or from seed from the trees found occasionally in the district.

Mr. PEARCE.—The results of my experiments with the pine were very good, but the Manitoba maple was not found satisfactory where there were Chinook winds.

Mr. Little read a communication from Mr. Stewart Mulvey, of Winnipeg, regretting his inability to be present but expressing his pleasure at the prospect of the formation of a Canadian Forestry Association, which he considered of great importance to the West.

The CHAIRMAN.—I hope that the success of the present meeting will be repeated in our future meetings and that we may have as interesting and useful papers. I trust also that it may be possible to arrange for an evening session. I cannot help saying, and I am sure we will all agree on that point, that we have obtained a great deal of information which will be turned to account and such as we will be able to embody in our report.

Moved by Mr. Thos. Southworth, seconded by Mr. Wm. Little, and carried, that in the absence of any publication especially devoted to Forestry, the generous