

At that time every individual tree grower had to make his own experiments, but, as a result of the work of the Experimental Farms in Manitoba and the Northwest the whole question of tree growth on the plains has now been placed in an entirely different position. At these farms, situated at Brandon and Indian Head, respectively, experiments have been carried on for a number of years and the results are now available for general information.

The trees which have been found most satisfactory for planting for wind-break belts are the Box Elder or Manitoba Maple, the Elm, the Green Ash and the Poplars. The Poplars are fast growers, but the wood is soft and not very durable. The Elm and Ash form a firm wood but grow slowly. The tree which has, on the whole been found most satisfactory for general purposes, is the Manitoba Maple, as it grows rapidly and strongly. Shelter belts are most useful on the north and west sides of the land to be protected, as it is from these directions that the prevailing winds come. Satisfactory belts have been formed by planting the trees five feet apart each way, twenty rows in a belt, making a shelter 100 feet in width. Thick hedges have also been used as wind-breaks, made by planting two and three rows of trees three feet apart, the trees being placed about two feet apart in the rows, and these have soon formed excellent shelter.

The cost per acre of planting the trees and cultivating until they are large enough to shade the ground and prevent weeds from growing so that they need no further care, is found at Brandon to be \$16.25, and at Indian Head from \$12 to \$18.

Trees may also be grown from seed, the most hardy being produced from seed found in the country. Large quantities of the seed of the Manitoba Maple have been distributed from the experimental farms and as this tree produces seed in six or seven years there will soon be plenty of it available.

There have been distributed from the Indian Head farm 220,000 young forest trees and cuttings and 4,000 lbs. of tree seeds, and from the Brandon farm 600,000 trees and cuttings, and 1,800 lbs. of seed.

While the experimental farms have done very much in the distribution of seed and cuttings to the settlers, there seems to be still an opening for some additional work in bringing the results of the experiments before the people most interested, and in assisting them to take advantage of such results. If the settlers could have to some extent the personal supervision of competent tree planters in the setting out and subsequent care of the plantations, success would be reasonably certain, and each such successful plantation would be an object lesson to the whole neighborhood. By the resume of the report of the Chief Inspector of

Forestry for the Dominion in another column, it will be seen that he is projecting a plan of organization along these lines.

The Division of Forestry of the United States have made arrangements for laying out plantations for settlers, precedence being given to lands considered most likely to furnish most useful examples after a study of the ground has been made. An agreement is made between the owner and the Secretary of Agriculture which provides that the Department, after personal study on the ground by its agent or agents, shall prepare a plan for planting and caring for a forest plantation, wood lot, shelter belt or wind-break on the land; that the plan shall be prepared for the purpose of promoting and increasing the present value and usefulness of said land to its owner and to develop and perpetuate a plantation of forest trees upon it, the Department to supervise the execution of the plan so far as may be necessary and to have the right to publish and distribute it and its results for the information of farmers and others whom it may concern. The working of this plan in the United States will be watched with interest, as it may be advisable to adopt a similar plan in Canada, if it is found to work satisfactorily and give the desired results.

The report of the annual meeting of the Forestry Association is ready for distribution. The design on the cover is very good and is the work of Mr. L. Pereira, the assistant-secretary of the Department of the Interior. Great difficulty was experienced in obtaining suitable illustrations for the report, as this branch of photography does not appear to have been given the attention it certainly deserves. The secretary will be pleased to send a copy of the report to anyone interested in timber or forestry.

We clip the following as a sample of a paragraph which appears occasionally in our newspapers:

ANOTHER TOWN BURNED.

Elmira, N. Y., May 8.—All the buildings in the village of Corbett, Potter Co., Pa., were destroyed by forest fires this afternoon and several people were badly burned, the inhabitants fled to Galeton, and many of them are now quartered in the Buffalo and Susquehanna Railroad station there.

The fact that such fires still occur, even in long settled districts, as witness the great Casselman fire of a few years ago, points to the necessity for a continual agitation of the question of the prevention of forest fires not only for the value of the wood destroyed, but for the danger there is to the homes and lives of those who may be in their path. The long spell of dry weather which we have had this spring was particularly favorable to the starting and spread of forest fires, and we cannot too frequently or urgently impress the necessity for care on the part of all those

who use fire in the woods, and of an intelligent study of the means of preventing their spread. The question of making compulsory the building of fireproof houses and of preventing the piling of lumber within the city limits is being discussed with much warmth and interest at the present time in Hull and Ottawa. Ottawa has progressed somewhat since the days when it was described by a certain distinguished person as "a city of lumber piles and civil servants," but the lumber industry is still one of the main sources of wealth, although as a result of the change in conditions the sawing of the lumber is not concentrated in Ottawa to anything like the extent it was some years ago.

The change, as well as the still great importance of the lumber trade in Ottawa is illustrated very clearly by the statement made by Mr. J. R. Booth before the Board of Trade of that city.

The fires at Hull and Ottawa illustrate very forcibly the dependence of a large number of our citizens upon the continuance of the wood industries in their various forms. Practically the whole of the City of Hull, and a large part of the population of Ottawa are more or less directly dependent on the lumber mills, and the pulp and paper and other industries. If the two largest establishments were not to resume operations it would mean almost the wiping out of the City of Hull, and would give the prosperity of Ottawa a blow from which it would take long to recover. The stoppage of the manufactures would not be a greater disaster than the loss of the sources of supply through waste or improvidence, and it is here that the work of the Canadian Forestry Association should come in to call attention to the necessity of taking stock of our forest resources and providing for their proper management, so that they may be a continuous source of wealth to the country, and may be available for those industrial purposes for which they will always be in demand.

The wooden house may be a more important social factor than many of us are inclined to think. If the following statement by a recent American writer can be accepted:

"Stone and brick are the almost exclusive building materials of Europe, and in our larger cities these materials, together with iron used in large edifices are gradually driving out the typical American 'frame' house. Not unlikely the latter will have practically disappeared from the United States in the course of fifty years. If so it is by no means a thing to be desired. Stone and brick houses are, no doubt, more lasting and substantial than wooden houses, but also far more expensive. If the average American family of small means in the future will not be able to obtain the cheap and commodious frame dwelling in which it lives to-day that will mean a long downward step in our stand-