

of Quebec), as one worthy of being followed by the different governments of the Dominion.

I would propose the same thing to all the agricultural clubs and societies, of what ever sort, which exist in the confederation. Even if the governments themselves do not take the initiative, the societies ought, for the pure sake of promoting the interests of agriculture, to undertake with heartfelt earnestness the work of the restoration of the forests.

Local societies, the agricultural societies of the province of Quebec, for example, might offer prizes for work of this description done in their respective neighbourhoods; and, then, those who had won first prizes would, doubtless, compete for the prizes offered by the county societies, and thus, a noble emulation would be excited among the farmers, not of each locality only, but also of each county.

The societies would appoint a committee of judges in each county, the members of which committee would be charged with the duty of visiting the forest-lands which had been improved or planted by the competitors, and after inspection, they would make their report to the societies.

All those interested in these competitions would become, *ipso facto*, members of the forestry associations. They would receive advice from them, and follow out their regulations. Thus the societies would grow considerably in numbers and influence, an influence which would manifest itself in the course of a few years by magnificent results. But before we get so far, it is necessary that the active assistance of the farmer be secured, and how to win this shall be the subject of my next chapter.

CHAPTER IV

DUTIES OF FARMERS AS REGARDS THE RESTORATION OF THE FORESTS.

The traveller, in passing through the longer-settled parishes of our province, sees, scattered here and there, on the hill-tops, on the slopes of the mountains, in the valleys, and in the low-lying marshes, clumps of trees varying in species with the quality of the soil. Here, are found sugar maples, there, poplars; soft maples, larch, fir, tamarack, cedars: all, more or less, useful woods. Observing all these thickets, which add amazingly to the beauty of the country, the traveller conceives that the inhabitants of the district possess all the timber necessary for their wants. A false conclusion! let him wait awhile, and examine these patches of woodland attentively. What does he find? cattle gnawing the branches, and stamping the roots to death. The trees, flourishing enough to a careless eye, are drooping, weakly, half-dead for want of moisture, and on the point of perishing for lack of nourishment. In a few years, they will have entirely disappeared, and the site which they now occupy will be naked and barren.

How many of these lovely groves have I seen, young as I still am, where, when children, I and my playfellows used to wander, listening to the music of the birds, and watching the sportive habits of the nimble squirrels. The groves are gone, though barely twenty five years have elapsed since we took our pastime therein. The cattle, as I said above, begin the destruction; the axe of the poor man suffering from the cold of a rough winter's day, carries on the work by felling the already half dead trees, and the rest, rotten, and with difficulty retaining their hold on the soil, are up-rooted by the fierce blast, and a weary desert occupies the once green and smiling spot.

Where the wood is still thick, though the grove may be small, the remedy is easy: enclose it with a fence. I expect to be told that this is impossible, or that the work would be costly, if done on a large scale. To which I reply that, the larger the wood, the better the enclosure would pay, consi-

dering the great value it would gain by the growth of the protected timber. The cattle would no longer browse on the shoots, the trees would shed their seed on the ground, the young plants would spring up and take the place of their predecessors, which, when arrived at maturity, or menaced with death from decay, would be carried off to the mill or to the wood-pile. To accomplish this is one of the easiest duties of the farmer.

But there is more than this to do. Those who have well-wooded property do not keep it for the mere pleasure of looking at it. Each year, the owner takes what he requires for his own use. If he does this carelessly and hap-hazard fashion, in a few years his store will have been expended, while, on the contrary, if he knows how to treat it properly, it will last for ever.

Let us see how he should proceed to ensure this durability. First, as before, all cattle should be excluded; then, no immature trees should be felled.—from ten to thirty young trees will be ready to take place of each of those taken away. Indeed, the ground is covered with the seeds of the felled trees, and it is by this that the forest are re-formed. A thick brush-wood is soon established by the young plants, if neither the hoofs nor the teeth of cattle are allowed to injure them. But here, there is one danger: they should not be left too thick; they would injure each other, keep off the beneficent rays of the sun, and never become fine trees. Judicious thinning, therefore, should be practised every three or four years.

In spite of all precautions, certain spots will suffer, some from fire, some from sudden rushes of water after heavy rains which carry off the top-soil, and so on. The vacancies due to these different causes must not be neglected. It is through breaches of this sort that the enemy, sterility, finds an entrance. How shall we oppose his attacks? Fill the naked spots by re-planting.

Of re-planting I will speak farther on. At present, I must content myself with saying that to re-plant a bare spot in the middle of a wood it is only needful to take from the space around it the young trees, which, being set immediately after being dug up, will infallibly take root at once.

By treating it in this fashion, every farmer can preserve his reserve of bush for an indefinite period; not only for his own life time, but for the generations that shall come after him, if, be it understood, they continue to observe the same precautions.

And it is not only the farmers who are concerned in what I have said about the re-planting of the bare spots being one of the important points connected with the restoration of the forests. Those lumbermen who hold timber limits on long leases ought, for their own sakes, to carry out the re-planting of the clearings as often as may be necessary. The governments of the different provinces ought even to compel them to do it, and the foresters should be obliged, by a regulation passed to that effect, to re-plant all clearings which they shall find have been made on the crown-lands.

People will, doubtless, exclaim against all this as impracticable, too costly, etc., but they will be wrong. Let us look for our edification at what the different European governments have done. They would have thought themselves remarkably fortunate if they had nothing but the filling up of bare spots to trouble them. Their enormous outlay was caused by the necessity of re-planting whole districts menaced with absolute depopulation, as well as with entire denudation of wood. Let us take care less we find ourselves in a like peril; the steps to avoid which should be taken before it becomes too great.

Another operation which will be found advisable in the restoration of the woodlands is the pruning of the young trees, to insure their regular growth, and of the old trees, to