

I. TARTE, Esq.,

Member of the Council of Agriculture.

Dear Sir,—We were talking, yesterday, of the choice of the autumn season that had been made this year for the celebration of the *fête des arbres*, and I gave you my reasons for preferring the spring. As you seemed to think that my observations were worth publishing, I address myself to you for that purpose.

Here in Canada, we have little practical knowledge of the art of forestry, which, brought to perfection in France and Germany, cannot be adopted here without great modifications (rendered necessary by climatic differences) which experience alone can teach us. My experience I offer for what it is worth: others may learn a lesson from my mistakes, as I have done myself.

At the commencement of my cultivation of forest-trees, I chose the autumn in preference to the spring, *because in the former season I had more time at my disposal*; I used to plant a little in spring, but chiefly in autumn. It is only after several years' experience that I have given up autumn-planting, and for the following reasons.

In October, 1882, I had set out about a thousand young Black-walnuts, sown, in a nursery-bed, the preceding autumn.

The work was carefully done, each little tree was planted by my own hands, in good fresh earth, placed in holes prepared beforehand.

Nine-tenths of the trees, when spring arrived, were stretched out on the surface of the ground, as if they had been torn out

by hand, and the rest were hardly better off, for all, with very few exceptions, had the bark stripped from their roots: it was split up nearly the whole length, mildewed and quite loosened from the wood. They were dead; we know that a tree cannot survive the loss of its bark, when it is stripped all round the trunk, though ever so slight a width; roots are still more delicate, and die immediately after losing their bark.

It is thus I explain the loss of these trees: the autumn rains had penetrated the newly moved porous ground to a considerable depth, and had saturated it with water; the spongy roots of the newly planted trees, had also imbibed water freely.

Hard frosts succeeded, the moisture enclosed in the roots expanded, and bursting the bark, raised the loose earth about the trees and threw them out of the ground.

Into what sort of land did you transplant these trees? you will ask me.

Into heavy land. If it had been sand, or light land, *not retentive of water*, the trouble would not have happened, whence I came to the conclusion that autumn planting should not be practised in land of strong quality and retentive of moisture.

Since that time, I have planted trees of the same sort, and

in the same soil, in spring, more successfully. The soil has plenty of time to become firm during the summer, and when autumn comes, it no longer absorbs the rain with same facility that it did when newly moved, especially if care is taken to have a gentle slope to remove the water from the foot of the trees.

I would advise all those who intend to plant this autumn to avoid strong retentive soils; but, on the other hand, if the soil is too light, the plants, though they may get over the winter, will run the risk of suffering from drought next summer, if they belong to those species which demand a certain degree of moisture, as all deciduous trees do.

To sum up, autumn planting is *dangerous* as regards our rigorous winter, while spring-planting is *inconvenient* on account of the short time which, in the midst of our other work, we can devote to it: it is better to plant one tree well, and save it, than to plant ten trees and lose them all.

In sowing tree-seed—decidedly the best way of growing them—I have always found it best to sow in autumn, and as far as this goes, the appointment of that season for the holding

of the *fête des arbres* is perfectly suitable, provided always, that the nuts, acorns, &c, are got ready in time. Naturally, the end of June is the proper time to sow elm and plane, as the seeds of those trees fall about that season.

Too much care cannot be taken to preserve the roots intact when setting out trees. M. Wm. McGibbon, the manager of the Montreal Park, whose knowledge of the subject nobody will dispute, does not seek to keep the roots long, or to have an abundance of them,

but he prunes them carefully, cutting out every damaged bit. He uses a very sharp knife, to prevent tearing the bark, and always makes the cut on the under part of the root, that the rootlets which spring rapidly all round the wound may bury themselves at once in the ground, and bring up from the lower couches of the soil moisture and nutriment for the support of the life of the tree.

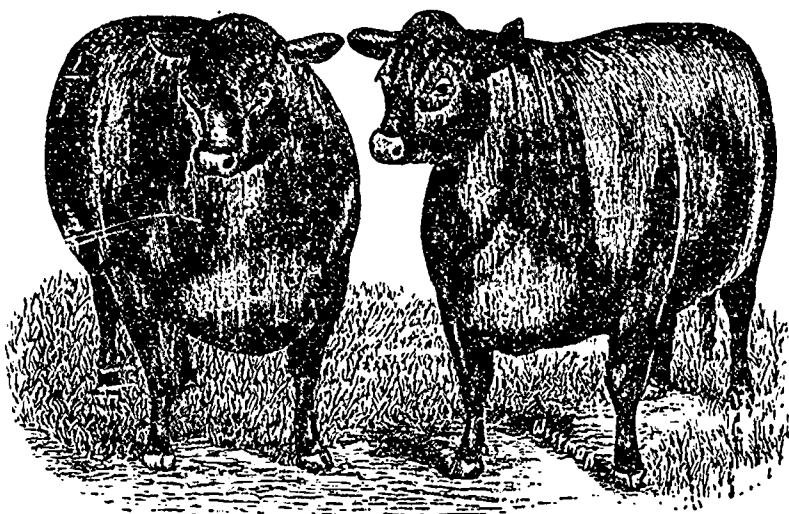
At the expiration of one year from planting, I have compared tree-roots which have been carefully pruned with others which have been left torn and bruised. The former had a circle of fine young rootlets radiating all round from the mother-root, and bearing to her from every direction the nutritious juices she in her turn carried to the tree; the others were nothing but torn and broken sticks, presenting no signs of having, from the date of their transplantation, made any effort at reproduction; or else, they showed a few little shapeless radicles, the last efforts of a moribund tree.

But I am growing sentimental, it is time to stop.

Believe me, my dear Sir, entirely yours,

H. G. JOLY.

(From the French.)



REMARKABLY EXCELLENT ABERDEEN-ANGUS STEERS.