

**SHRUBS FOR ORNAMENT.**

10. A proper mixture of lilac (10 ft.), guelderose (6), high bushed cranberry (10), hazel-filbert (8), hawthorn, English (15), barberry (6), and mock orange (8). The figures indicate the branching diameter of mature plants.

**SOILS.**

11. All these trees and shrubs do well upon good naturally dry loam, and the lighter character of clay loams.

**DISTANCE APART.**

12. Shade trees from 20 to 30 feet, shrubs from 6 to 12 feet, according to diameters given in No. 10 note; and for a mixed shelter belt, ten feet apart is best in view to future thinning and selection of standards.

**WHERE TO GET PLANTS.**

13. We have yet to be educated in knowing how to choose, prepare and manage the planting of young trees from our forest. Our College has in view to issue special advice on this subject next year. In any event, all trees and shrubs are most reliable from well managed nurseries, as being always kept in a prepared transplanting condition, they are ready to move at any time, and better able to do well on removal. The first cost is less from the neighbouring bush, but so is the success less on an average even under the very best management.

**SIZE OR AGE OF PLANTS.**

14. The younger the plants the less risk with all kinds; aim at not more than from four to six years in the nursery. Avoid branchless trees that have been standing close together.

**TIME TO PLANT.**

15. From end of April to end of May. Transplanting with the buds and young leaves is not dangerous, but requires more careful attention; fall or autumn planting is not so safe.

**PREPARATION FOR PLANTING.**

16. On obtaining plants cut off any rough branches and roots, so as to balance under and over ground—do not interfere with the evergreens in this respect. On receipt of trees cover the roots with soil in a shaded spot and water them. Take special care of small fibrous roots. Previous fall digging for shrubs and belting is good.

**WEATHER FOR PLANTING.**

17. If possible, choose mild, cloudy, and moist weather, but not so wet as to make the soil sticky.

**MAKING PITS.**

18. Make pits, square not round, one-half wider and deeper than is actually required; remove any water or scum from old made pits—squaring off the bottom well.

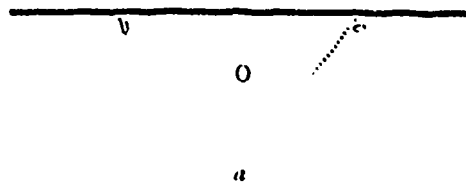
**HOW TO PLANT.**

19. Fill up pit to required depth of special tree; plant one inch deeper than the old mark on the stem; incline the tree slightly towards the prevailing wind of the district; spread out very carefully all the roots and fine fibres in the pit; fill in the

best loaming soil first, shaking and gently pulling the plant up and down a little, so as to run the soil amongst the roots. When half the pit is filled tramp moderately firm with the foot, and on finishing give another tramp—heeling close up to the stem. Puddling roots before planting is only required when both soil and atmosphere are dry. A naturally moist soil is the best.

**PROTECTION.**

20. On public roadsides we would not require to protect shade trees were our laws properly administered; if the trees are planted close to a fence the best guard is the triangle, thus:—



This consists of one post at *a* with fence lumber from bottom to top nailed at *b* and *c*. If the line of shade trees is on the out-edge of sidewalk—eight or ten feet from the fence—the best guard is an open one, strong, and with room to allow for growth. Never tie a tree, nor allow it to rub against the guard.

**AFTER ATTENTION.**

21. If wind makes openings around stems, have them made good immediately, as drought would damage seriously; use dry grass or other rough material as a light mulch in mid-summer round each tree for the first two years, and place a deeper mulch during winter for the same period. Keep ground cultivated until the tree shades itself in after years. Do not cultivate later than August, as it tends to prolong growth that may be damaged by winter. If a severe and continuous drought occurs immediately after planting it may be necessary to water—depending upon situation and a retentive soil; avoid watering if possible, as soft cultivation with mulch is better for future success. Never allow scum to lie on the soil around trees.

**PRUNING.**

22. No general rule can be given as to pruning; keep the tree well balanced without interfering much with its natural character; encourage the leader, or stem shoot; prune any time from fall of leaf to budding—never draw sap by pruning in early spring; remove all dead or damaged matter anywhere, as well as improper sapling growth from the lower stem.

**SPECIAL NOTE FOR YOUNG PEOPLE.**

Every properly developed tree is a thing of beauty and utility. Trees are the nobility of vegetable life—man's companions and, to some extent, teachers. They supply us with food, clothing, medicine and the many things of every day; they make nations, and actually affect the individual, for men brought up in an oak or a pine forest, respectively, are differently constituted. Trees keep us warm and

cool, they mellow and purify the air for our health, they break and soften the cold winds, and moisten the hot sunshine; they breathe, perspire, and sleep and sing, they moan, and whistle, and groan; trees have electric affinity one to another, according to kind, area covered, distance apart, and the particular atmospheric conditions; they have also particular friends and enemies in nature, both animal and vegetable, and hence for these and many other reasons we do not deserve well of our country if every person does not plant one tree every year of his or her life.

**A PLEA FOR CANADIAN HISTORY.**

THOUGH many refuse to Herbert Spencer the name, philosopher, few thinking men will dispute the main propositions of his admirably clear and comprehensive tract on education. That one end of the child's training should be: first, sound physical health; second, intellectual development (by whatever means) and third, fitness for the duties of citizenship, is as plain as a first axiom. It cannot then be right to bring up children with no reference at all to duties they must sooner or later be called upon to perform. The Canadian school-boys of to-day must soon take their place as property-holders in the community and exercise the franchise in local, provincial and Dominion affairs. What preparation are they receiving for this important function? What is our primary, secondary, higher education doing to make young Canadian patriots or even citizens of Canada?

Our colleges do little or nothing. Our Provincial University carries the anti-progressive spirit so far as to prohibit to its students in their literary society the free discussion of Canadian politics. As a consequence, the majority of its graduates leave college with less interest in Canada, the country they are to spend their lives in, than in modern Germany or classic Greece. Those that have any conceptions of Canada as a country, any knowledge of her wants or possibilities, owe no thanks for this to their *alma mater*. The sphere of the primary schools is, of necessity, limited. It is true that on the list of subjects to be taught in high schools we find Canadian history, but even here its vital importance is far from being realized. One reason for this is the wide-spread feeling among Canadians of good-humoured distrust of everything Canadian. We belittle our history, our literature, our public men; we look to London or New York for culture; to Leipzig or Johns Hopkins for scholarship.

A great deal has been said about the political destiny of Canada. Whatever that destiny may be, we may be assured of this, it is Canadians who must work it out. The