

Be this as it may, the fact is, we have found defects of this kind in all soils, and in all expositions, but most frequently in wet ground and in northern and western expositions; the latter may perhaps proceed in cases when the cold is more intense, in such expositions; and in the other, from the trees which are in marshy grounds, having the tissue of their ligneous fibres weaker, and because their sap is more abundant and aqueous than in dry land; which may be the cause that the effect of the rarefaction of liquors by the pores is more perceptible, and more in a state of diminishing the ligneous fibres, as they bring less resistance thereto.

This reasoning seems to be confirmed by another observation; namely, that resinous trees, as the fir, are seldom injured by the sharp frosts of winter, evidently from their sap being more resinous: for we know that oils do not perfectly freeze, and that instead of augmenting in volume, like water, in frosty weather, they diminish when they congeal.

Dr. Hales says in his *Vegetable Statics*, p. 16, that the plants which transpire the least, are those which best resist the winter; because they have need of only a small quantity of nutriment to preserve themselves. He says, likewise in the same part, that the plants, which