suffer from frosts. With regard to the aspect or exposure of orchards generally, this much may be said: Near large bodies of water the most favorable exposure is on the slope towards the water. In a district away from water a northern or northwesterly exposure is the best, as the blossoming period is retarded and danger from spring frosts escaped. The slope, however, must not be too pronounced, or too cold and backward. Account must also be taken of prevailing winds, and a few words may be advisable here as to the use of windbreaks.

WINDBREAKS.—The value of windbreaks for the orchard is a much debated question, full of pros. and cons., only a brief summary of the main points will be possible here. The gradual removal of forests in Ontario has rendered the sweep of winds over the farm lands more violent and more noticeable. Winds acquire, to a greater or less degree, the temperature of the area over which they pass, thus modifying the climate of every new district touched. Hence a strong wind from an open body of water will raise the winter temperature of the adjoining land, while wind from a colder area may have a disastrous effect. Wind is a powerful agent in the evaporation of moisture, and, apart from the more rapid evaporation in an open country during the summer, a strong dry wind may have an appreciably bad effect on fruit trees by evaporating the moisture in dormant twigs during winter. The value of a windbreak evidently, therefore, depends on the direction and character of the prevailing winds. Where strong land winds are of frequent occurrence, a windbreak is clearly advisable. To quote from Bailey: "The benefits derived from windbreaks are, lessening of evaporation from soil and plants; protection from cold; lessening of windfalls; lessening of liability to mechanical injuries of trees; retention of snow and leaves; the enabling of trees to grow more erect; lessening of injury from the drying up of small fruits; retention of sand in certain localities; hastening of maturity of fruits in some cases; encouragement of birds; ornamentation."

The injuries from windbreaks are as follows: "Preventing the free circulation of warm winds and consequent exposure to cold; injuries from insects and fungous diseases; injuries from the encroachment of the windbreak itself; increased liability to late spring frosts in rare cases." This is a clear statement of the advantages and disadvantages of windbreaks, and the evidence is strongly in favor of windbreaks, unless they are unwisely planted so as to exclude warm winds that are often a fruit grower's salvation during a severe winter. The common objection to windbreaks, viz., that they harbor all kinds of bad insects and tend to encourage fungous diseases such as mildew, scab, etc., has some strength, but with the intelligent use of a proper spraying apparatus this objection loses its chief force, and care can also be taken that such trees as are especially infested by injurious insects and fungi are left out of the plantation. As a general rule a mixed windbreak is advisable of two or even three rows. It should usually be not too dense, checking the violence of the wind rather than excluding it altogether. Norway spruce, Austrian and Scotch pines are effective; and amongst the deciduous trees those should be used which are most healthy and thrifty in the locality.

THE SOIL QUESTION.—Having decided as to climate, location and exposure, it would become necessary to consider the matter of soils for fruit, and under this head "drainage" and "tillage" will also be referred to. It may be said in the outset that nearly all soils so far as their mechanical texture is concerned will produce with fair success the various fruits, provided that the necessary conditions of fertility, proper drainage and cultivation are fulfilled. The fulfilling of these conditions, however, becomes a some-