first year, but not after, and additional fertilizing should be given to make up for loss of food material. The soil of a vineyard should be frequently stirred, but not so deeply as to touch the roots. All the moisture possible should be conserved in the soil, for, as already intimated, the grape needs a great deal. No weeds should be allowed in the vineyard.

The first year of growth should be directed to obtaining as good and stable a root system as possible. To that end, no summer pruning is desirable, and the vine may be allowed to grow at will or may be trained temporarily to a stake. If that system of training is followed which consists in having the main trunk running parallel to the ground on the first wire, then at the end of the first year the cane should be cut back, leaving three buds, two of which are allowed to grow the second year. These are trained as before to a temporary stake, and the lateral shoots on them should be pinched off after three leaves are formed. If the Kniffen system is to be adopted the growth of the vine should be as yet directed perpendicularly in one main stem.

The third year should begin the training of the vine. The Kniffen system is the one now most generally followed. It is well adapted to large vineyards. Two wires are used, the vine trunk being carried to the top wire and there separating in two canes, one running along the wire to the right, the other to the left. Similar but smaller canes grow outwards along the lower wire. The fruiting branches are not tied, as the weight of the fruit bends them downwards.

The best time for pruning is in early winter before the vines become frozen. In summer, lateral branches are pinched off, in order to concentrate the vigor of the vine upon the development of the fruit.

The grape is a healthy and independent grower, not yielding readily to enemies. But there are two kinds of fungous diseases that often destroy the fruit and greatly impair the vitality of the vine. These are commonly called powdery mildew and black rot. Where few vines are grown the fruit may be tied in small paper bags as soon as the bloom has fallen. The Bordeaux mixture, however, is an effective remedy against both diseases. The dilute form is recommended, namely, 2 lbs. of lime and 2 lbs. of copper sulphide. But five applications in the early purt of the season will often be required.

The varieties to be planted vary according to conditions of soil and climate. Each prospective amateur will have to consult a reliable local nurseryman or fruit-grower. Of the black varieties the standard is the Concord, the best for general

purposes and the widest known of all American grapes. Moore's Early and Worden are also fine varieties. Of the white, the Niagara is the popular variety, and is well deserving of all its popularity. Moore's Diamond, Jessica, and Pocklington are also recommended. Of the red kinds, the Delaware is the favorite, but the Salem and the Brighton must not be omitted. The Vergennes, also, is a late and prolific variety, and keeps till far on in the winter.

## Cherries.

Fruit-growers have been agreeably surprised a the high prices realized this year for cherries. Eating cherries have sold from \$1.25 to \$1.50 per basket, and the sour varieties have remained in



Cherries.

the neighborhood of \$1.00. Yet the crop was never better in the Niagara district than it has been this year. Cherry trees are becoming scarcer every year throughout the country where fruit-growing is not made a specialty. Towns and villages have not been able to secure their supplies from local sources, and have had to draw from more distant centres; so that the fruit-growers of the Niagara peninsula are having a wider and more distant market to supply with this luscious and indispensable fruit.

The reason of the growing scarcity of cherry trees is not far to seek. Black knot is slowly but surely killing them off. A number of years ago almost every farm had a row of cherry trees along the garden fence, but the black knot appeared, and was neglected, until now a cherry tree is a rarity where once it was a common sight.