prune carefully and shorten-in the other trees. If the fight to control the scale forces us to grow low-headed orchards, to shorten-in all of our trees so that we will have a new growth of wood every season, and to keep our trees so that the fruit may be gathered from not higher than a six-foot ladder, it will not be an unmixed evil but possibly a blessing in disguise. Second, thoroughness in application of the remedy or spraying material. No matter what material is used or what variety of pump is handled, cover the tree and branches thoroughly. Do not accept statements of agents who tell you that their material will go farther as it spreads on the branches after being applied. They do this so as to induce you to purchase some of the more costly remedies. If these remedies are diluted too much or scale. A better plan is to arrange for a number of growers to have an engine or boiler and cook by steam. Where this is not available, an agricultural boiler can be rigged up. Where the steam is used, the cooking can usually be done in about one hour. When the agricultural boiler is used it will take longer. When boiled with steam or agricultural boiler bring 12 to 14 gallons of water to the boil, then throw in 20 pounds of good lime and quickly add 18 pounds of finely pulverized sulphur. Stir occasionally. Dilute by adding enough water to make 45 to 50 gals.

"Commence spraying early in the season Spray the sides of the trees from the windward side, then watch until the wind blows from the other way, and do the other side; a good, stiff breeze is preferable. This helps to

An "Auto-Spray" at Work in a Vineyard

all of the twigs are not covered at the end of the season, you will invariably find the scale very prevalent.

"Many mixtures are being placed on the market. Every season some of these are discarded owing to failure, others stay with us a little longer, or may be used because of fancied ease in application. For the commercial orchard, nothing equals the lime-sulphur remedy properly boiled, because of its cheapness as compared with all the others, and because of the good work that it does, as it remains on the trees throughout the season; it can be seen on the trees now at date of writing 10 months after the application.

"The lime-sulphur wash can be prepared by boiling with the heat of the lime, but this is not safe to depend on as some of the barrels may not get sufficient cooking, owing to some defect in the lime, or something else may result, where this is applied, in not killing all the carry the spray to points on the opposite side of the tree and not only ensures better and more thorough work, but also obviates the disagreeable features of the mixture falling back on the clothes and person when spraying is done in calm weather

"For the encouragement of new beginners, I may say that those who have sprayed three and four years with the lime-sulphur mixture are nearly all planting out larger acreages. They feel convinced from past experience that the scale can be kept in check and the trees healthy. This is a strong point in favor of lime-sulphur. The wash prevents leaf curl in the peach, is a good fungicide and can be used on apples instead of copper sulphate before buds open. Trees sprayed with it show darker and glossier foliage during the summer and the bark is made clean. The grower who takes care of his orchards now will be well repaid for years to come,

and the careless grower will be driven from the business."

## ARSENITE OF LIME

A comparison between arsenite of lime and arsenate of lead as regards their value as insecticides for mixing with Bordeaux mixture is made by Mr. Jos. Tweddle, of Fruitland, Ont., in the following letter: "For fruits, arsenite of lime when carefully handled in the early summer gives almost as good results. as arsenate of lead, and is much cheaper. White arsenic must be boiled with fresh lime as follows: Take one pound of arsenic, two pounds of fresh lime and one gallon of water, boil briskly for 45 minutes, then use one and one-half pounds of the mixture to one barrel of Bordeaux. Apple foliage is much less resistant to damage by this insecticide after July than before. My experience shows that three times the abovementioned strength may be used in June without burning the foliage, and that one-half that strength will burn it in July and after. Inexperienced persers, however, should use the arsenate of lead, as it is safe to use full strength and is easy to prepare. Use three and one-half pounds per 50 gallons of Bordeaux mixture."

## ONE GROWER USES ORDINARY LYE

Spraying with old-fashioned lye, to clean the bark of trees and to destroy scale, is practised by Mr. E. Hipple, of Beamsville, Ont., who has faith in its effectiveness. The process of making the lye is, in the words of Mr. Hipple, as follows: "I take a barrel (two or more if required) and bore three holes in the bottom near the rim. The barrel is placed on a raised plank. The holes in the bottom are covered so that the ashes to be used will not clog. The barrel is then filled with ashes, firmly stamped in. On this is poured about 12 quarts of water a day until the lye commences to leach out, then three or four times this quantity of water is added. This is continued until the lye becomes weak. The lye so made is used for spraying diluted with an equal quantity of water."

## Hardy Late Cherries

What are the best hardy cherries as late as or later than Montmorency? Richmond is too early. Robins and cherry birds take them.—C. W. B., Prescott, Ont.

One of the best hardy cherries which comes in just after the Montmorency is the Ostheim. The English Morello is also later than the Montmorency but it is not as hardy as the Ostheim. Another very late kind is Brusseler Braun.—Answered by W. T. Macoun, Horticulturist, C.E.F., Ottawa.

No tree requires regular pruning so much as the peach. Low-headed peach trees are best.