



FIG. 2259. Proper method of preparing Bordeaux mixture. The stock solutions are made up and kept in barrels 1 and 2; these are diluted in barrels 3 and 4, and finally mixed in the spray pump barrel 5.

should not be allowed to languish for the want of the application of a remedy. The remedy is known, apply it.

II.—Bordeaux Mixture.

Many speakers at the meetings of fruit growers report that the want of care in the preparation of the Bordeaux mixture is the main reason why better and more uniform results are not obtained in the spraying of orchards for the prevention of fungus diseases. As spraying operations will begin next month, a few notes in the imperative form regarding the preparation of the Bordeaux mixture will not be out of place here.

1. Use nothing but fresh quick-lime. The lime should be slowly slaked by the gradual addition of water.

2. Never mix the concentrated stock solutions together.

Stock solutions of milk of lime and blue-stone are usually prepared and kept in different barrels in readiness for spraying operations. In barrel No. 1, 25 lbs. of fresh lime are gradually slaked with 25 gallons of water; in barrel No. 2, 25 lbs. of copper sulphate or blue-stone are dissolved in 25 gallons of warm water. (Fig. 2259).

These are the stock solutions: Each gallon of milk of lime contains one pound of lime, and each gallon of blue-stone solu-

tion contains one pound of blue-stone. When we wish to make up a barrel of Bordeaux solution, all that is necessary to do is to take out 4 gallons of milk of lime, and 4 gallons of blue-stone solution, and either dilute each in separate barrels in 20 gallons of water before mixing in the barrel attached to the spray-pump, or else pour each separately into the barrel in which are already 32 gallons of water. The first method, that is, where the four gallons of the stock solutions are diluted in separate barrels to 20 gallons, before mixing in the barrel attached to the spray pump, is the preferable one.

If the milk of lime and blue-stone are mixed in the concentrated form, just as they are taken from the stock solution, a precipitate of a flakey nature will soon settle out, and either fall to the bottom or clog the nozzle. It is also believed that the fungicidal value of the copper and lime compound formed is not as great as that formed when the solutions are mixed in a dilute form.

3. Test the Bordeaux to find out if sufficient milk of lime has been added. This is most readily done by means of the ferrocyanide test. A saturated solution of this substance can be purchased at any druggist's for a few cents. In testing, place some of the Bordeaux, which has been thoroughly stirred, into a saucer, and add a few drops of the