

of potash and phosphoric acid they contain, on account of their mechanical action, especially for light soils.

I have a hundred acres in orchard, and was almost in despair about fertilizing it properly, until I found I could buy ashes from farmers all about me for a mere song, and as much as I wanted. And now every winter I keep my team engaged collecting ashes for miles around, and apply it to my orchard. The results are evident, apples in abundance, and of such a size as astonished those who saw them; Baldwins often as large as Kings.

My soil is chiefly a sandy loam, and consequently of just the character to be most benefited by wood ashes. The quantity applied is about one-half to one ton per acre, or about one-half a bushel to a bushel per tree.

### SPRAYING FOR APPLE SCAB.



THE best proof that the apple scab fungus is the immediate cause of the greater part of the apple failures of Western New York is afforded, according to the Cornell Experiment Station Bulletin, by the fact that thorough spraying with Bordeaux mixture is usually followed by a great increase in the productiveness of the orchard; and it may be said that the indifferent results which occasionally follow the spray are equal proofs that there may be other causes than the fungus for the failures. Much of the failure with the Bordeaux mixture, however, is due to careless or hasty application. If the Bordeaux mixture is properly made—using an excess of lime—no injury may be expected to follow its use, and it should be applied with great thoroughness. The operator should endeavor to completely cover all the leaves and shoots.

A mere sprinkling, such as most persons give, is of little good. One thorough application which drenches the tree is better than several of this ordinary kind. Then people are always waiting for fair weather. Now it is the rainy weather when the fungi spread most seriously, and it is then that the spray is most needed. With plenty of lime, the mixture adheres well. Spray between the showers, even when the trees are wet, if you can do no better. To delay is to fail. It is better to spray in the rain than not to spray at all. There is abundant proof that two to four applications of Bordeaux mixture are capable of keeping the fungus almost completely in check. It is not known what value there is in an application before the buds open, but it can do no harm, and it is probable that it is very serviceable in most seasons. At the latest, spraying should begin as soon as the blossoms fall. Make the Bordeaux mixture with six pounds of copper sulphate, four pounds (or more if the lime is air-slacked) of lime, and about forty gallons of water. It is always advisable to add Paris green for various insects—one pound to every 250 gallons of the mixture. Then take up your position near the tree, with a strong pump, and apply the mixture until the tree is soured.