

become deficient in lime and the phosphates, and the cheapest remedy is liberal dressing of wood ashes and bone dust; or in sections where bone dust is not easily attainable, dig in around the tree whole bones from the daily use of a family, or procured from a slaughter house. Potash, dissolved in water, and applied to vegetable mould from the woods, and this dug in around the tree, is also a cheap and ready way of supplying food requisite. Iron filings, etc., from smith's shops is also good, and hence the impression of some, that through it the blight was cured or prevented, the fact being only that a certain element requisite to health was exhausted in the soil. Oyster shell lime is also an excellent manure. In England all the wood ashes are saved by families, and purchased by farmers at a high price, and have a fixed market value as much as any other market production. Some of the rich farmers give peat to the poorer classes to burn on condition to save the ashes for them, which would be an excellent idea in this country to adopt, particularly in New-Jersey, where it can be found in plenty.

"Those who wish to read more on the subject of ashes as a manure, are referred to Bridgman's Young Gardener's Assistant, in which will be found an article of some length on this important subject. The above, but particularly bones and oyster shells, are the best manures for the grape vine.

"An article in Tucker's excellent work, the 'Rural Register, for 1855,'—a work which should be in the hands of every cultivator in the country, says: So great is the loss resulting from the stunted and diseased growth occasioned by neglected cultivation, that an intelligent cultivator gave it as his opinion, that 'if nine-tenths of our orchards should be cut down, and the labour and cultivation which they receive be expended on the remaining tenth, more and better fruit would be raised.' It also states as the best manure for fruit trees,

"A mixture of swamp muck, with one half to one quarter of its bulk of stable manure and about one-twentieth of leached ashes. These ingredients should lie in a heap together for a few weeks, and then be worked over. If for peach trees, the soap suds from the laundry, thrown over the heap, will improve it; if for cherry trees, which will not bear high manuring, the proportion of muck should be larger, and with less of yard manure and ashes.

"In speaking of the carelessness of some men in ploughing an orchard, it says:—

"Farmers may be seen driving their teams and plows directly over a young fifty-cent tree, tearing its bark and risking its life in order to avoid running over an adjacent potato-hill, not worth three mills currency. There may be three causes for this strange behavior. One is habit, or doing so because others do. Another is a sort of indefinite notion that trees will take care of themselves. A third is an almost total want of appreciation of the real value of trees.

"Dr. Kirtland states, 'that orchards on the limestone hills of Ohio invariably afford the best fruit.' The same cultivator tried for his pear trees on worn-out land, specific manures, but his trees only made six inches growth in a season. He then effected a complete renovation by applying a dressing of phosphate of lime, (pulverized bones), ashes and barn-yard manure, with a limited supply of common salt.

"An interesting experiment is stated in the *Horticulturist*, on a large pear tree, bearing cracked, blighted, and worthless fruit, which was restored to health and the production of good fruit. The change was effected by digging three feet distant from the tree a circular trench 4 feet wide and 20 inches deep, and filling this with fresh soil (rich) and turf, and mixing two bushels of scoria from a blacksmith's forge, two bushels of charcoal, and two pounds of potash. The soil and potash were doubtless the chief cause of success. Other experiments of a similar character have been equally successful. Thomas, in his *American Fruit Culturist*, thus writes of manure for the pear tree:—

"As it contains a large quantity of phosphate of lime, it gives strong promise of being benefited by bone dust. For applying, the bones may be broken and dissolved into a paste, in a large tub, by means of sulphuric acid. The acid should be diluted with two and a half times its bulk of water, and successive portions then added for three or four days, till the bones are dissolved, for which purpose their bulk of the diluted acid will be required. The bone-paste is then mixed with several times as much old manure, peat or compost, and applied so as to give eight or ten pounds of the paste to each large tree, and to smaller ones in proportion. If ground bones only are used, twice that quantity may be applied. As the pear contains also much potash, twice as much ashes as bone may be used in the compost.

"This, the above, is a valuable receipt, and we feel much indebted to Mr. Thomas, both for this and for many more equally as valuable."