

managed than fruit-raising. In the country, since I can remember, when a man had planted his orchard he supposed his work was done, and if he was so fortunate as to prevent his own or his neighbor's cattle spoiling his trees, he was a lucky man. The idea of mulching, manuring, or cultivating an orchard for the benefit of the fruit, was hardly thought of, and unless to get some other crop was seldom resorted to. Under that system of management, where the soil was suitable, crops of inferior apples were obtained, occasionally, for a few years, and premature decay followed, as a dispensation of Providence for the sin of ignorance. But as time progressed, the farmers in the neighborhood of cities grafted their trees and cultivated their orchards, and the example, like other fashions, began to extend into the country, till good winter apples, as well as other articles, are now introduced almost universally.

For more than half a century I have been marking observations upon the progress of my own and neighbors' fruit trees in different towns and on different kinds of soil. Those of us who have been at the expense of transferring trees from the richest nurseries, on account of their beauty and rapid growth, and planting them in a different kind of soil, have sometimes been so unfortunate as to see their fine trees perish, either by winter killing, bark-bursting, or blight. Within the last 35 years my neighbors, at different times, have selected the most trifly and beautiful trees from rich nurseries and transplanted them upon inferior soil, and have seen an utter failure in their expectations of a fine orchard. In almost every instance, apple trees, pear and cherry trees taken from rich nurseries and transplanted in this vicinity, have disappeared from the land, save a few half-dead, stunted apple trees.

I think we have been persuaded into an erroneous course in regard to selecting our nursery trees. We are generally advised to select the most thrifty, vigorous, and of course the most beautiful tree to form our orchards. After experimenting, I have uniformly found those apple trees succeed best which were "illigimate" if I may use the expression or those that accidentally sprung up in my own fields or pasture-grounds, which being transplanted, have made the most hardy and productive trees on my farm. I have not known a tree of them to bark-burst or winter kill, while those from nurseries have had all the dis-

eases incident to fruit trees. Forced growth is premature decay and death. The past fall, from some cause or causes, our apple and pear were uncommonly large and free from scars and worm-holes, which circumstance goes to confirm ideas previously entertained in regard to fruit-raising. In the first place, the great abundance of rain was sufficient to supply the thirsty grass with moisture and allow the roots of the trees a grudging pittance which it could not imbibe itself. The custom of seeding down orchards to grass is a bad one; a crop of apples fit for market, will not grow for any length of time in an orchard that annually produces a crop of hay. Let him who doubts the assertion, examine in summer, the ground under his fruit trees, which has been fed down by cattle or produced a crop of hay, and he will be convinced that there is no economy in his attempt to produce a double crop. On land suitable for an orchard, if the site is sloping, especially, he will generally find by penetrating through the surface of the closely-compacted grass roots, from six inches to two or three feet of soil as dry as ashes. This explains the reason why apple crops on grass land depreciate from year to year, and how they stand in need of their share of the rain that falls. Another cause of fair fruit may have been feeding of the windfalls in previous years to cattle and pigs; but I consider the main cause of our fair fruit, was manuring and preventing the grass from molesting and robbing the trees of their share of nutriment.—S. BROWN in *Boston Cultivator*.

HOT BEDS.



As the season is approaching for the use of hot beds, a few words about the best mode of making them will not be out of place. We have no idea of saying any thing new, but hope to say something that may be useful.

A hot bed should be located in a spot that is well sheltered on the north and west, and open to the south and east. If shelter is not already provided by a fence, wall, shrubbery, or something of the kind, a cheap temporary fence may be erected of rough boards, straw mats, or in some other way that the reader's ingenuity may suggest. This shelter or protection is needed chiefly to prevent an undue radiation of heat from the glass, and the entrance of a strong, cold current of air when the sashes are lifted for ventilation. This ra-