

no one has yet undertaken such a work. The querist is mistaken in supposing that "nearly all varieties are subject alike" to such attacks. The Chicasaw and Americana classes are nearly or quite exempt, while many of the domesticas, such as Bradshaw, Damson, Bavaz, are far less liable to such attacks than Washington, Green Gage, Jefferson and numerous others.

In the newer and more northern regions of the lower peninsula, the disease was for a time altogether unknown; but it is finding its way northward—an evidence that the cause is not climatic; but rather to be attributed to an imported enemy.

There are evidences that thorough, rich cultivation may be beneficial as a preventive, but this can certainly not be relied on as a specific.

We have, in a few cases, suggested the

free use of water applied during warm, dry weather, at this season, in the early mornings, by means of a fountain pump and a rose, or sprinkler, which, in the case of either red spider or fungus, could hardly fail to prove beneficial; but we are not aware that the experiment has ever been properly tried.

The disease is a very serious one, since the loss of the foliage at so early a period greatly enfeebles the tree, often occasioning its death from the effects of the cold of the ensuing winter.

Whatever may be the cause, it seems dependent upon but slight peculiarities of climate, soil or other modifying influence; since a few localities like the valley of the Hudson, in New York, and perhaps others, are, to a notable extent, exempt from its attacks.

## Around the House.

**FERTILIZING THE LAWN.**—In cities it is very customary for people owning small pieces of grass to cover the whole area in late autumn or early winter with a heavy coat of stable manure. It makes no difference if the grass extends on every side of the house, and if the manure has the vilest appearance and odor imaginable, the lawn must be manured, and this is the way to do it. Now, I wish to disabuse the minds of people who think this the only way to maintain a good turf. It is not even the best of many ways. It is not at all necessary that one sacrifice the beauty of the green turf or that one endure the vile odor of fermenting manure in order to keep up the fertility of the lawn. Plain ground bone, and Mr. Wilde says it may be quite coarsely ground, scattered over the surface at the rate of five pounds to the square rod, will disappear so as not to be observed and makes an excellent manure. I have used ordinary wood ashes with excellent results. A compost made of the droppings from the poultry house mixed with road dust or sifted coal ashes, pulverized and sown broadcast, does not in the least disfigure the lawn and produces im-

mediate and excellent results. Mrs. Winans, of Benton Harbor, says that tobacco stems broken up finely and sown upon the lawn will produce a very dark green verdure. Use any of these plans rather than spoil the appearance of the grass half the year, that it may be beautiful the remainder. The sacrifice is entirely uncalled for. S. Q. L.

**LAWN EMBELLISHMENTS.**—Shrubs are valued for their bloom as well as for form and foliage. Each variety will serve some special end. As a rule plant in irregular groups, as directed for trees. At projecting points in shrub masses, plant some hardy herbaceous perennials. Use vines for porches or for covering a half dead tree-top or rubbish pile. Plant flowers mostly at the side of the house in irregular but gracefully-shaped beds, and about the trunks of trees when they are young, perhaps. No special paths are needed about flower or shrub groups. Rock work is seldom satisfactory, and is only appropriate in a retired portion of the grounds. A pile of shells, rocks and scoria in the front yard is sadly out of place. Heap them in

some back and shady corner and you will find great delight in transplanting from the woods and meadows an assortment of hepaticas, spring beauties, blood-root, trilliums, bellworts, phloxes and ferns. If you have a pond near by, introduce some water lilies, cat-tail flags, pickerel weed, arrow-head, and near by set some weeping willows and birches and ashes. Do not despise flower, shrub or tree because it is native or "common." As a rule the best known is better than the imported variety. Give thought and attention to all the details of making a pleasant home. It is a worthy work. You will be surprised to find how much beauty can be attained at little cost, and how rapidly everything hastens forward to the completed plan in your own mind. You will have a constant comfort and a fresh hope realized every year as the trees grow, and transformation follows transformation toward the fulfillment of your original design.

PROF. W. J. BEAL.

**BERRIES AT HOME.**—Few families, we rejoice to say, suffer summer and autumn to pass without putting up various small fruits in quart cans for family use. We know several women in moderate circumstances, who, to the best of our knowledge and belief, get more bliss from two or three dozen cans of raspberries and blackberries, gathered in fence corners and served to visitors, than Mrs. Astor and Mrs. Vanderbilt derive from all the exotics and eatables displayed at their great social parades.

One thing, as voracious chroniclers, we are compelled to say. Berries in rural districts come through much tribulation! When they must be picked, the men are very busy; of course they are; women and small boys go up and down through tall grass, weeds, brush and briars, gleaning where somebody managed to go before—wearied and sad from small returns, they resolve to start early the next morning and are off at day-break; about 9 o'clock, drabbed, torn and tired, they return with about six quarts of berries, half of which they give to the masculines for dinner and supper, evidently thinking Ingersoll has repealed retributive justice and abolished it altogether. Half the time spent in

fatiguing tramps after wild berries would supply better ones in a fruit garden. They grow well in the shade of trees or fence, and are easily tended and made productive by a liberal supply of cheap mulch.

Pearl Creek, N.Y. HUGH T. BROOKS.

**GRAPES ON TREES.**—The grape rarely fails when allowed to climb over trees. It matters not what kind of trees, or whether they be living or dead, if they only have branches that the tendrils can take hold of. Astonishing crops are produced in this way, even on vines that receive no care. The most successful planters in the world plant trees and vines together so that the latter may have a suitable support. Many unskilled farmers have blundered into the same method and have had abundant success. A vine will make twice the growth in a tree that it will on a trellis, and where an effort is made to have it occupy both, it is always found that its main energies are expended in the tree. A newly planted vine should have brush instead of a stake, as it has no means of clinging to the latter. If the tendrils can find nothing to take hold of, they continue in motion for a time, reaching in all directions, and this is exhausting to the vine. For this reason skilled gardeners often cut off the tendrils. When growing vines on stakes I have often driven lath nails in convenient places for the accommodation of the tendrils.

Although grapes do so well on trees without much care, let no one suppose that he can accomplish anything by planting vines at the roots of established trees. The soil being pre-occupied, the vine will not have a fair chance. Plant it at a distance from the tree to be covered, and after it has made some growth it may be brought to the branches, where it will take care of itself. On nearly every farm there are worthless trees that might be made to carry bushels of grapes.

MATTHEW CRAWFORD.

**LAWN PLANTING.**—Handsome landscape planting consists in leaving at least a portion of the grounds as open lawn so that there may be an agreeable distribution of trees and open space, and thus the eye may have a wider range. The thick planting