

planting of grape vines. The deep trenching and heavy manuring advised by some writers I believe to be not only unnecessary, but positively injurious. It causes an undue and unnatural growth of wood; it causes the texture of the wood to be less firm, and the vine becomes less able to resist extremes of temperature.

I conclude, therefore, that any soil that is well drained and in suitable tilth to produce a good crop of Indian corn, is suitable for the vine.

#### PLANTING THE VINE.

After considerable experiment and much personal observation, I have been fully convinced that we ought to give more space to our vines than has been usually given. Not less than twelve feet apart each way is required for the best development and most economical and profitable culture. Parties interested in the sale of vines may urge closer planting; but experience and sound reason, based upon a knowledge of our climate and of the habits of the vine, conspire to indicate this distance as the best for us to adopt, especially if planting a vineyard. If planting but a few vines in the garden, where space is limited, they may be set as close as eight by ten feet.

Of the manner of planting, it can surely not be needful to write. Any one that has set out a tree or a cabbage plant, knows enough to set out a grape vine. It is a living plant, not a post, and should be treated accordingly. The hole should be made large enough to allow of the roots being all spread out in their natural position, and then carefully covered with finely pulverized soil. Nor is the season of much importance. At any time after the leaves fall in autumn, and before the buds burst in spring, and the soil is in condition to be worked, the vine may be planted with success. The measure of success

will depend much on the care and judgment of the planter. A covering of coarse litter upon the ground over the roots, usually called by gardeners a mulch, will well repay the trouble of putting on.

Plant them in fall or spring, as may be most convenient; plant carefully, and mulch after planting.

#### PRUNING AND TRAINING.

##### FIRST YEAR.

When the young vines in a new plantation begin to grow, all the shoots but one—usually all but the one nearest the ground—should be rubbed off. If, however, the one from nearest the ground seems to be very feeble, or from any other cause unsuitable, then the

shoot next higher on the cane should be preserved and all the others rubbed off. A small stake—a strip of lath will answer—should be thrust into the ground at each plant, and the vine carefully tied to that, as it grows during the summer. None but slovenly cultivators will allow the weeds to grow and choke the young vines; and such persons should never plant them. This will be all the care that the vines will need during the first season.

At the end of the first season's growth the young vine will have the appearance shewn in Figure No. 1.



Figure No. 1.  
VINE ONE YEAR TRANS-  
PLANTED.