

the stakes two to three feet apart, so that the canes can be made to cover the entire space along the rows of vines in a vineyard.

TRIMMING.—If the surplus wood is wanted to propagate from, it may be cut either into long or short cuttings. A long cutting contains, at least, two buds, and when the joints are short, three or four buds or eyes. When the eyes are from eight to twelve inches apart, there is no necessity to have more than two to a long cutting, which, when set in the ground, will allow its lower eye to be full six to eight inches below the surface of the soil.

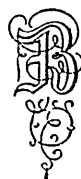
Short cuttings consist of a single eye only to each, and are propagated in the open air, by placing them horizontally about one inch and a half below the surface, and kept moist in dry weather by hand watering. On this system of making cuttings double the number of vines can be produced, from a given number of cuttings, than can by setting the long cuttings in a diagonal position, as they should be set, as the lower eye in the latter case forms the roots of the plant, whereas in the former case an upright cane, as well as roots is produced. The one eye system is attended frequently with a great deal of labor in watering, while the other generally requires no water, except what the clouds supply.

You first select two, or more if you please, of the best canes the vine has produced, either such as were entirely grown the present season (and always select such when they are to be found of well ripened wood, and sufficient length,) or those that contain the most new wood, and these are to be your fruit-bearing canes for next season.

Sometimes, when care has not been taken to grow canes, especially for producing fruit the next season, one has to depend on the *laterals* of the fruit-bearing canes of the present season in which case, every other one is sufficient, which will give you an opportunity, if desired, to grow a supply of fruit-bearing wood the next season, from the *laterals* cut back to one eye.—*Rural American*.

POTATO TOPS, &c.—Every thing in the shape of rubbish, such as early potato tops, cucumber vines, refuse radishes, spring mulching, &c., should be buried on the spot, leaving a clean and neat surface. When an assistant digs a mess of potatoes, cause him to bury the tops at the time. They will decay and enrich the land.

BLIGHT IN APPLE AND PEAR TREES.



BENJAMIN D. Walsh, President of the Illinois Natural History Society, and well known as an entomologist, recently read a paper before the Society mentioned, on the cause of the blight, or the "fireblight" in the apple and pear tree. The conclusion to which he has arrived is, that the blight is caused by certain species of insects called leaf-hoppers. We give below a summary of the points laid down as the result of his investigations. It may not be amiss, however, to remark, that blight in pear trees has often occurred in this vicinity where no trace of injury by the insect alluded to, several species of which are well known here, could be discovered, even by experienced and careful entomologists. The following are Mr. Walsh's points:

1. Fire-blight in the apple and pear is caused by two species of leaf-hoppers (*Tettigonia*) described by me, in the *Prairie Farmer* last year, as *Chloroneura malefica* and *Chl. maligna*.

2. In the autumn these insects lay their eggs, from 7 to 10 in number, in slits about $\frac{1}{8}$ of an inch long, cut lengthwise, in the bark of twigs and branches, and easily recognized by their scaly, rough appearance. They also pass the winter in large numbers in the perfect, or winged state.

3. As these eggs lie dormant for eight months before they hatch, and as the sapwood turns brown on each side of the egg slit, there must be some poisonous fluid deposited by the mother insect in the egg slit; otherwise the wound would grow over and heal up.

4. This poisonous fluid is absorbed into the system of the tree, and blight results the next spring, even before the young *Tettigonians* are hatched.

5. The beak of the *Tettigonian* appears to have some poisonous property, for the leaves turn brown when they are punctured by it. This is called, out West, "leaf-blight," and may also be seen on grape vines badly infested by their peculiar leaf-hoppers.

6. Almost every tree has one or more peculiar leaf-hopper. For example, two species occur on the crab, thorn, pear and apple, the same that I believe to cause the fire-blight; another on the white elm; another on the oak; another on the sycamore or button-wood—all three of them undescribed; and four distinct species on