

to nourish and give flavor to the fruit; and continuing its descent, it deposits in its course the cambium or mucilaginous substance, by which new and successive layers of wood and bark are annually added to the tree; while whatever is not adapted as aliment to the peculiar wants of the plant, is again returned by the roots to the earth."

Another very important matter to be attended to in transplanting fruit trees, and one which we are sorry to perceive is very often neglected, is to keep down the weeds around the trunks. When a good orchard is desirable, one that will progress rapidly to maturity, it will be well to keep the soil under careful cultivation with weeded crops, avoiding of course, in the routine, all such vegetables as will shade the soil too much, and preferring, as a general practice, those which are called pivoting crops—such as turnips, beets, parsnips, carrots, &c.,—and seeing that the fertility is kept up, or on the increase, by copious applications of the best manure. After the removal of the crops in the fall, the surface should be carefully cleansed of all spurious vegetation, and plowed, but not harrowed, as the rougher it is left, the more efficiently will the frost act upon it. This is of importance in effecting the destruction of the roots of weeds, and their seeds, as well as in exposing the ova of worms and other insects deposited beneath the surface. It has also a favorable effect upon the constituents of the soil itself, rendering the latter fine, by its powerfully disintegrating action. It is scarcely possible to reduce the soil devoted to young fruit trees to too fine a tilth. The more, therefore, it is worked, the better it will be for the trees—always king special care to avoid disturbing the roots.—*Cor. Ger. Telegraph:*

KEEPING FRUIT THROUGH WINTER.

How to ripen fruits, is a branch of pomological knowledge as important as how to grow them; yet it is one very little understood. It is questionable whether this knowledge can be taught; for experience shows that no rule is applicable to all varieties alike,—for some apples and pears are improved by being taken off the trees before they are ripe, while other kinds are best when left on the tree as long as possible.

With regard to apples and pears,—kinds of fruit most generally understood when we talk about preserving fruits,—the fall fruit, for the most part are best gathered a few days, or, it may be a week, before they would drop of their own accord from the tree; while others ripening at the same season are best left on until

they will scarcely bear their own weight without falling.

The Bartlett Pear, for instance, may be gathered at least two weeks before apparently ripe, and will mature well in a cool, shady place, and, to some tastes, be even better for it; while the Duchesse d'Angouleme is ruined by what, in the same instance, would be called premature gathering. All these nice points have to be practically determined,—and the only safe general rule can be given that when a fruit will part readily from the tree when gently lifted; or when the seeds inside are of a deep black color, the crop may be gathered and stored away.

In most cases, by far too many fall-ripening varieties of fruit are planted. If the orchard be intended to supply family consumption, the crop will not keep till all is used; and if for market purposes, many will rot before purchasers are found for them; as more important duties have to be neglected to give attention to them.

Where a great abundance of fall fruit exists, and it is desirable to keep them as long as possible, they should be gathered before fully ripe, just as the seeds are changing color, and kept in a cool, dark, room,—one not too dry, however,—until they can receive attention. This coolness and darkness is moreover the main secret of keeping fruit of the winter ripening kind through to their proper season; and it is in endeavoring to find the exact conditions that so many fail. If too dry they shrivel; if too hot they particularly ripen and are worthless; if too damp they rot; and if too cold they are tasteless and insipid.

To just hit the mark is not easy to a beginner, and yet in practice it is found not so difficult as it appears to be. Some house cellars are so constructed as to be just the suitable thing; but the majority usually border on some one of the extremes we have noted.

Probably the best plan for the apple where the fruit is perfectly sound, is to carefully hand pick the fruit, and pack them gently in flour barrels, being careful not to bruise them in the least, either in filling the barrels or in handling them afterwards. In this way they will keep in cool cellars that are tolerably dry, when in the same cellars they would probably shrivel on open shelves. Where the fruit are subject to the depredations of the apple moth, or to fungoid diseases, this plan is liable to objections, as the injured fruit will decay; and is difficult to get at inside the barrels; and if not taken out in time, a considerable portion of the fruit will be destroyed by the heat evolved in putrefaction. The English fruit rooms, which are mostly constructed more with an eye to perfect fruit preserving and ripening than to economy of arrangement however, are usually made expressly for fruit, and all gardens of any pretensions have the fruit room as regularly as the tool shed. They are usually built on the north side of a wall or other buildings, in order to secure a regular temperature.

The walls are thick to ensure against frost penetrating them and many of them have a roof of straw thatch which tends still more to keep out frost, and a regular natural temperature inside. Along all four sides of the building are tiers of shelves arranged above another, like the