

## THE NURSERY.

Although, as a rule, it will be the most convenient plan to buy trees from the professional nurseryman, yet he who propagates apple trees by root-grafting, crown-grafting, or budding, for his own use, should have a nursery in which to grow them until they are ready for the orchard. A good sandy loam soil, which does not bake and is well drained, is best suited for this purpose, and will grow the strong, healthy trees which are desired. The ground should be thoroughly prepared and the young trees planted about 12 inches apart, in rows from 2½ to 3 feet apart. Cultivation should be thorough up to about the middle of July, when it should cease, as in colder climates, especially, it is very desirable that the wood ripen well, and late cultivation would encourage late growth. It will be necessary the first year the grafted or budded trees are growing in the nursery to go over them carefully and cut out any shoots which may be coming from the stock, and also to reduce the graft to one stem should more develop. If any side branches grow, however, they should be left intact. In small nurseries it is sometimes advisable to tie the young trees to stakes the first season. This will make them straighter and will help to keep them from being broken. These trees may be planted in the orchard the following spring if one-year-old trees are to be used. By the end of the second year or the beginning of the third, after the branches have been pruned to the proper height and the tops shaped, the trees will be in the best condition for planting in the orchard.

In nurseries in the colder districts the wood of yearling and sometimes two-year-old trees will kill back in winter. Unless injured wood is cut back to healthy wood in the spring, the trees are liable to become black-hearted. The practice with the best nurserymen in the north is to cut yearling trees back to near the ground in spring, thus ensuring a healthy trunk and a strong growth for that season.

Q. Do you use any wax?

A. We use wax, but it is not absolutely necessary. The advantage of the wax is that it will keep out the air and enable the wood to heal quicker around the edges; it prevents the wood from drying out around the edges. Then we place our roots in moss, say from the 1st March until this time of the year. By that time they are what we call calloused, that is, an excrescence has grown out around the wounded part and it has begun to heal over. When you put the roots into the ground it does not take very long to complete the healing process and at the end of the first season the wood is knitted together and you have a growth of 12 or 18 inches or more depending on the strength of the soil in your particular district, perhaps it may be 2 feet in some places. We had a growth in one year of about 5 or 6 feet of plums and cherries when grafted in the open.

*By Mr. Schell (Oxford):*

Q. Do the nurserymen graft their trees in that way?

A. Yes, that is one method employed by the nurserymen. There is another method called budding. It is done in the latter part of the summer. Where that is done the little trees are grown in rows in the nursery. A slit is made in the bark near the ground and a bud inserted and then it is tied with a piece of string. The tree and bud will knit together and the latter remains dormant until the next spring. Then it will shoot up and make a strong growth. The top is cut off in the early part of the season and you have the young trees from the bud.

*By Mr. Blain:*

Q. Is there anything new in the way of grafting?

A. In the grafting of apples?

Q. Yes?