

results. The string is then cut, the bud remaining dormant until the following spring. In the spring the top of the tree is cut off just above the inserted bud, and the new tree allowed to grow from this single bud of the variety you are desirous of propagating. The most important points to note, to obtain successful results in budding, are: (1) Keep your knife sharp; (2) use only well-matured buds; and (3) bud when the sap is running well. Propagation by budding is made use of in the case of apples, pears, and stone-fruit, roses, etc.

GRAFTING.

WHIP-AND-TONGUE GRAFTING.

Grafting is practised during the dormant season. In nursery-work, the seedlings, which are either purchased or grown in the nursery from the seed, are dug up in the fall and are grafted during the winter. These are set out the following spring in the nursery rows. The whip-and-tongue method of grafting is generally practised. A sloping cut is made on the scion and stock, and a split is made about the centre of each slope. These two "tongues" are fitted into each other, and the whole tied with raffia or string. Care must be exercised to have the growing layers (i.e., the cambium layers) of the scion and stock placed opposite on one of the sides of the graft at least, as this is the only point where a union can take place.

WOOD-CUTTINGS

This method of propagation is practised with all currants, grapes, gooseberries, willows, poplars, etc. Obtain in the fall or spring well-matured wood of the previous season's growth. It is preferable to gather this in the fall, as, if the buds are allowed to swell, the results will not be as good. Cut this wood into lengths of 7 to 10 inches, according to the distance apart the buds are on the cuttings. Cut the lower end off square just below a bud and leave an inch of wood above the upper bud on the cutting. Tie these cuttings in bundles, and store them, preferably upside down in moist sand or sawdust in a cool cellar. They are left in this condition during the winter. The cuts will have callused during the winter, and when set out in the spring will start growth immediately. In planting in the nursery row, plant them about 4 inches apart in rows. Leave one or two inches above the surface of the soil, and pack the earth well around the cutting.

MOUND-LAYERING.

Mound-layering is practised with gooseberries, currants, etc. It consists in mounding up the bush in the spring or summer with earth until the greater part of the bush is covered. This banking of earth causes the lower branches to take root. These are cut away from the main bush and made use of in setting out new plantations.

TIPPING.

This is practised to propagate the black-cap raspberries, dewberries, logans, etc. The plants produce long, drooping branches, which bend over and touch the ground. These tips will often take root themselves, but they are more liable to root if a little soil is thrown over them about August or September. These tips when rooted are severed from the parent plants and serve as new plants.