

the sprouts grow rapidly with the exception of trees budded on *Poncirus trifoliata*, which commonly fail to send up sprouts when the top is removed. The number of sprouts should be kept within reason, two or three for small limbs or trunks and proportionately more for larger limbs or trunks. After they have grown for a season they can be budded as described for nursery stock. Where stump sprouts are to be budded a clean cut should be made across the stump before the sprouts have a chance to appear, as an attempt to even up old stumps or to remove dead trees from amongst a number of sprouts is very difficult and usually results in damage to the sprouts. If small trees are to be treated in this way the tops can be lopped with a saw and staked to the ground until the sprouts are budded. This method has the advantage of furnishing a top to feed the root system throughout the period necessary to produce a new top.

When working large limbs budding can also be used directly on the limb if the workman is careful. In case the bark is reasonably soft and pliable some form of shield budding can be used as previously described. Often the curved or angled incision will be found superior to the "T" for this purpose. When the bark is thick and will not "work" without splitting it can be shaved and scraped to remove the outer hard layers and the inner bark left for "working". If the buds are slow to "take" a partial girdling of the limb above the bud or cutting back the top of the branch will help.

Bark grafting is commonly used in working over stumps and large limbs. It is simple, quick, and efficient. Its chief difficulty lies in a mechanical weakness of the union that may continue for some years. Like cleft grafting it gains a year of time on sprout budding. For this type of grafting the stump or limb is cut off at a right angle to the axis and the cut surface smoothed up with a knife. Small scions up to six or eight inches long are given a long slanting cut at the butt end and the sharp end shoved under the bark with the cut surface facing the wood of the stump (Fig. 20A). Wherever possible a concave place in the contour of the stump should be used and if the bark is at all pliable the scion can usually be shoved under the bark easily. Where the bark is hard it may be necessary to make a short downward cut with the knife and to open the bark a little at the top before the scion can be inserted. A brad or small nail may be used to help hold the scion in place. The stump is taped