

METHOD OF GRAFTING AND TOP-WORKING THE AVOCADO

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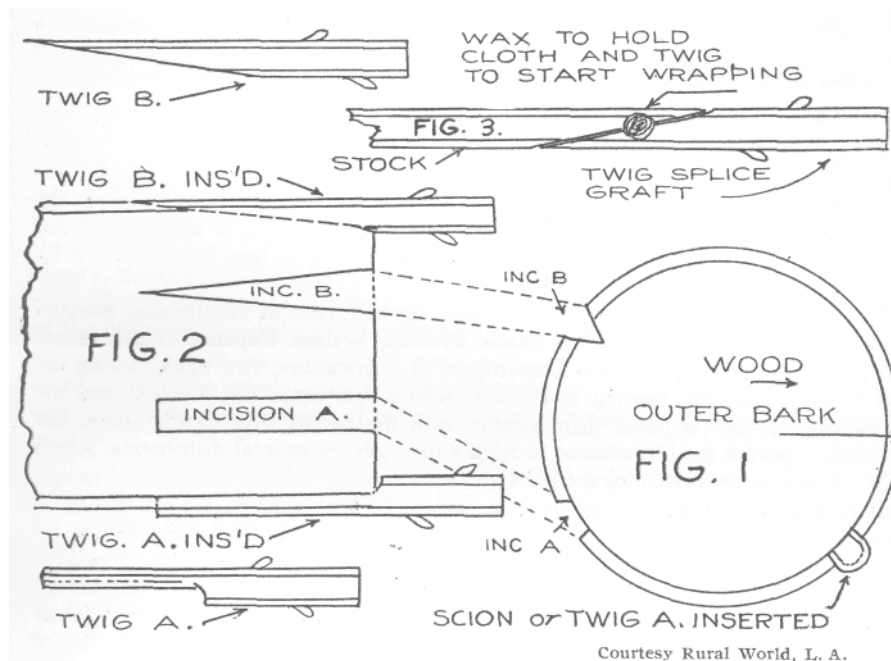
Mr. President, Ladies and Gentlemen:

The accompanying diagram shows different methods of making cambium connections in grafting without splitting and injuring the wood.

Fig. 1. is an end view showing incision "A" through the outer bark to accommodate the scion or twig "A" which is cut to approximately fit. Also showing twig "A" inserted. Also incision "B" to accommodate twig "B".

Fig. 2 is a side view showing twigs "A" and "B" inserted and also incisions "A" and "B" for their respective twigs.

Fig. 3 shows a splice graft where the stock is quite small. The dark spot represents a little of the wax which is put on the bark hot, to which one end of the cloth is stuck, serving to hold the twig and stock together to begin wrapping. This is a very effective method where the stock is small and where twigs can be obtained practically the size of the stock.



THE WRAPPING CLOTH AND HOW TO WRAP AND PUT ON THE WAX

Old muslin strong enough to wrap tightly is the best. Next best is cheap muslin. Cut into

strips about three-quarters of an inch wide and long enough to wrap the twig tightly to the stock. Beginning about one-half inch below the twig, wrap even with the top of the stub of the stock. The most convenient way is to put a little of the hot wax on the bark and slick one end of the cloth to it and begin wrapping, and when all the string is used except a couple of inches put a little of the wax on the cloth and stick it fast, then wax the cloth thoroughly, and down on to the stock. Wax top of stub well and up on the twig about half an inch. Put a little wax on top of the twig.

HOW AND WHEN TO REMOVE THE WRAPPING

Do not remove the wrapping at all, but after the grafts have grown twelve or more inches, cut through the cloth to the bark on one side opposite the twig, leaving a slight amount uncut at the top and bottom of the cloth and then with the hot wax cover the place cut to keep air and water out. This will allow the graft and stock to expand and still keep it tightly bound, supporting the twig. This is important. When the graft grows eight or ten inches, tie one branch to a stake, and allow the others to go downward. This applies to top-working large trees, especially.

THE WAX - HOW TO PREPARE AND USE IT

There are different ways of making good cambium connections without splitting the wood and injuring it, but the most important thing is a wax that will make a perfectly air-tight and water-proof seal. This simple wax is asphaltum and crude oil. For about one gallon of broken asphaltum use about one-half pint of rather heavy crude oil. If the grade is light use less. There is more danger of getting too much crude oil than not enough. The small amount of crude oil serves to keep the asphaltum more plastic, makes it adhere better and prevents cracking in cold weather. I used this on the stubs of orange trees sixteen years ago when I budded them over and where the stub is not healed over the wax is still perfect. Melt together over a gas burner or other heat and boil until all the foam disappears, and also until most of the vapor is gone. Keep it to about the boiling point and apply with a small brush, kept hanging on the inside of the vessel, into the wax. Where several grafts are to be made the wax must be kept hot by keeping a gasoline or oil burner under the vessel. A suitable carrier for this purpose can easily be made.

SHADING THE GRAFTS AND WHITEWASHING

It is very important to shade the grafts as soon as possible after grafting. A palm leaf tied to the limb is a cheap and effective shade. Burlap fastened to stakes is good. Be sure to whitewash the entire trunk and limbs. Best results are obtained by grafting four or five of the largest limbs two or three feet from the trunk if they are to be obtained, using the ones that will make the most symmetrical tree. In top-working leave plenty of small limbs to carry the sap, some, if possible, on the limbs grafted, and do not cut them off until the next spring.