

sticks" may be sent a thousand miles by mail or express. This is a great convenience in the way of obtaining promising new fruits for trial.

The knife specially made for budding is most suitable, but one who has had some experience will succeed with other knives—a first rate "Barlow" has done good work. It should have a thin blade, a very keen edge and a half-rounding point. And it should be used for no other purpose than budding. An ordinary knife must be at hand also, to be used in any trimming of the young tree that may be required.

The budding may be done in the branches of a large tree if desired; but in the case of a young peach tree (or a young tree of any



FIG. 2633.

kind) it is best done within two or three inches of the ground. A smooth place in the tree, or branch—the "stock," as it is called—is selected to receive the bud; and if any leaves or young shoots are in the way they are to be removed; and the dirt is to be wiped off with a rag, so that nothing will interfere. An upright incision, about an inch in length, is made with the rounded point of the budding knife, just through the bark, holding the knife in the fingers about as a lead pencil is held; then a short cross incision is made at the upper end of the first one, as at *b* in Fig. 2633.

Now comes the raising of the bark, which is a very particular operation, for it must be done without touching the soft layer of new wood under the bark. If the soft, new wood is touched a wound is made, and while this wound is healing the bud which is put in perishes, instead of growing fast to the stock. The raising of the bark must be done gently, beginning at the upper end of the incision. This is done with the thin piece of bone at the end of the handle of the knife, pressing on the cut edges of the incision and lifting slightly on both sides and the whole length of the incision. In the absence of the regular budding knife, a thin, smooth piece of wood may take the place of the piece of ivory, but the expert budder requires neither, as he uses the rounding point of the budding knife—and saves time. Fig. 2633 at *c* shows the incision made and the bark raised, ready for the bud.

A bud is now to be cut from the prepared scion, which is held in the left hand with the lower end extending outward. The knife is made to enter about half an inch below one of the buds and is drawn toward the operator, nearly horizontally so as to make a thin slice of the wood along with the bud, and coming out about three-fourths of an inch above the bud. Fig *d* represents the bud ready for insertion. (The piece of footstalk of leaf is not quite long enough for convenience in holding). Some take out the thin slice of wood, but this is unnecessary, and some times injurious.

The bud is taken hold of by the footstalk left for the purpose, and inserted under the raised bark, beginning at the upper end of the incision and pushing it down gently to the lower end. In case a portion of the bud extends above the cross incision, it is to be cut off so as to make a good fit, according to *e* in Fig. 2633.

Tying is done at once, in order to exclude air and moisture and assist the healing process which is to unite the incision, using