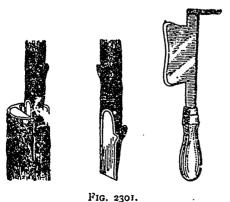
Grafting.—There are very many apple and pear orchards throughout Ontario which are unprofitable on account of the varieties planted. Many kinds also, once profitable, are so no longer on account of the apple scab, as, for instance, the Fameuse, the Early Harvest, and the Fall Pippin.

Now any man, who has a little skill in the use of tools, can easily transform such trees to kinds that are valuable by grafting; an art by many looked upon as difficult, and invested with many secrets.

The first thing to do is to secure scions of the kinds wanted; for these must be cut while the buds are yet dormant, and be laid away packed in earth, or in fresh sawdust, until needed. If near a good city market it will pay to grow a few such fancy apples as Red Astrachan, Duchess and Wealthy, and scions may be secured at a very small cost from almost any of the nurserymen who advertise in our columns.

Apples and pears may be grafted much later in the season than stone fruits, for while the latter may be done as early as possible in the Spring, the former need not be done until the last of May, or even the early part of June.

Cleft Grafting is the usual method, and for the smaller limbs it is the best. For this the tools required are a sharp saw for cutting off the limbs where the graft is to be inserted, a sharp knife to sharpen the scion, a



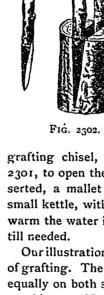




FIG. 2303.

grafting chisel, such as is shown in Fig. 2301, to open the cleft where it is to be inserted, a mallet to drive the chisel, and a small kettle, with a lamp so fixed in it as to warm the water in which the wax is placed till needed.

Our illustrations will represent the process of grafting. The scion, Fig. 2302, is bevelled equally on both sides, with the outer edge if anything a trifle thicker than the outer to ensure firm contact between the cambium layer of the scion and the stock. It is an advantage to have a bud on this edge as shown; if the stock is small one scion may do, as in the engraving; but if large it is better to have one on each side, and thus if one fails the other may succeed.

The stock should be smoothly cut across with the saw, and then split with the grafting chisel, the narrow projection on the back of which is used to open the cleft for the insertion of the graft. All the cuts are then covered with grafting wax and the work is complete.

Grafting Wax may be made in a variety of ways, but in all the ingredients are resin,