land having been thoroughly prepared, as for corn, is marked out in rows, say three feet apart, and the kernels planted in the drills about an inch deep and three or four inches apart in the rows. If the season is favorable, the seedlings will mostly be ready for budding in the following August or September. The sticks of the bud are cut from the young wood of such varieties as it is desired to propagate, and, the leaves being removed with the exception of the petiole which serves as a handle, the buds are cut out as required and in the manner shown

in the accompanying illustration. With a knife adapted for the purpose, a "T" shaped incision is made in the bark of the young tree near the ground, usually on the north side, and this enables the operator to lift the bark and neatly insert the bud in its place, when it is immediately

tied, either with some soft cord, or, what is better, with strips of the inner bark of the basswood tree. All these operations are so plainly shown in our illustrations, that farther details are unnecessary. The following spring the seedling trees are cut off just above the inserted bud, and the whole strength of

Cutting of bud the tree directed into it; as a result it will grow so rapidly, that it will be large enough for orchard planting by another spring.

The best soil for the peach orchard is a sandy loam, well drained, and it should be well prepared, both by thorough cultivation, and a good dressing of wood ashes before planting.

Fig. 31. fanner of inserting a bud.

Where the Yellows does not prevail, the peach trees may be planted twenty feet apart each way, but, where the trees are short lived on account of this disease, we are planting them much closer.

On page 6 of volume 13 will be found a good list of peaches for shipping purposes.

Grape Vines on Heavy Soils.—The old idea that grapes thrive best on light land is mainly due to the fact that such soils are naturally dry. While a heavy clay is not best for the grape, it is no insuperable obstacle to success in vineyarding, provided it is thoroughly underdrained. In fact, grape growing is possible under a wider range of conditions and soil than is the case with any other crop. The one thing that grape roots cannot abide is stagnant water. No matter if this dries out in mid-summer it is then past the power of the vine to regain lost time. Land thoroughly drained to the depth of three feet warms more quickly in the spring and makes a difference in temperature of five to ten degrees or more at the time when the vine most needs warmth.