be wound around the graft. To make graftings more successful, it is well to cultivate the stocks carefully beforehand so that a vigorous growth will be had at the time of grafting. The scions should also be strong, well-selected twigs, taken only from good stock that will produce a thrifty growth.—Rural Canadian.

## IMPROVED METHOD OF LAYING OUT AN ORCHARD.



N laying out land for orchard planting, the use of a wire marked with solder gives far more accurate measurement and is more time-saving than a measuring pole and stakes. A light galvanized wire is best, and the drops of solder that mark the distance required for the trees, or vines, should be prominent enough to be seen readily when the wire is on the ground. In taking the wire from the coil it should be unrolled, not pulled out from the end, as in the latter case the wire is

more liable to take short kinks that interfere with its accuracy. About 100 yards is the limit of length of wire that can be readily handled by two men on fairly level land. On undulating land a third man will be needed at the middle of the wire. The ends of the wire are made fast to the middles of two short,

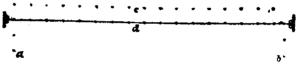


FIG. 747.-IMPROVED ORCHARD CHAIN.

stout sticks which serve as handles in moving the wire. When the wire is stretched on the ground for marking, it is held in place by pegs set against these handles. In marking off the orchard, the first step is to run a base line a, as seen in the sketch, along one side of the field. The wire is stretched tight and straight where the tree row is wanted, the handles are pegged down and then each solder mark has a peg put down beside it. The wire is then carried to the opposite side of the proposed orchard-if that be not more than a wire's length distant,—and again stretched exactly parallel to the bass line, b, and each solder mark pegged as before. This is a guide line, merely. The distance from the base line is not material, but it is material that it be exactly parallel. Now the actual work of laying off the orchard begins. The wire is stretched along the side of the field, at right angles to the base line, c, the first solder mark touches the first peg on the base line, the wire touches the corresponding peg on the guide line, is made tight and straight, fastened down, and a peg placed at each solder mark. Then the wire is moved down the field a peg, d, and the operation repeated. If all has been done with care and correct ness the pegs will range straight both ways and any number of diagonals may be sighted, greatly to the pleasure of the lover of exact work.—American Agriculturist.