

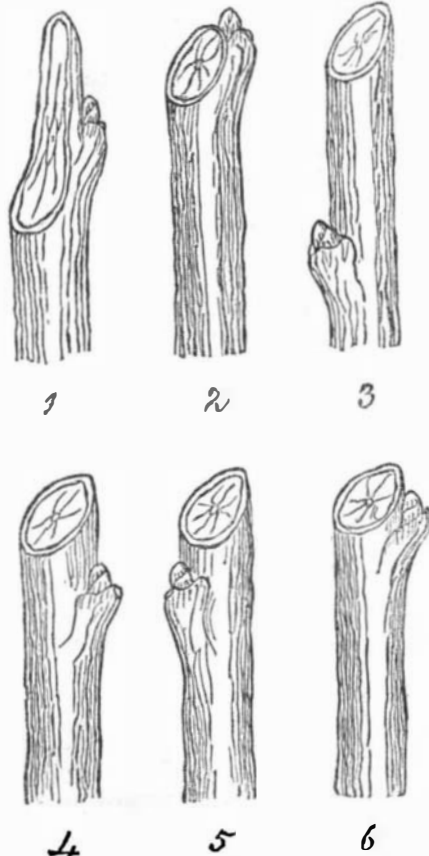
IMPROVED ANIMAL TRAP.

The moment we looked at the model of this invention, we thought about pirates. Not that we mean to insinuate that there is any bond of connection between buccaneers and rat traps—romance forbid such base comparisons! But when we saw an apparatus in which the unsuspecting animal is beguiled to walk along a treacherous pathway, which suddenly turns a somersault and deposits him, before he has any time to remonstrate, in some unknown region beneath, we were reminded of the polite requests, on the part of the big whiskered gentry, which resulted in their captives promenading to the end of a plank, from which they failed to return. The inventor says that this trap will fix any animal in exactly that way, any animal, moreover, from a mouse to a buffalo. Although a mouse might stand such treatment and not need subsequent repairs, we doubt if a buffalo would. In fact, we think that the average buffalo, after gloriously coasting down the end of a plank into a yawning chasm, would experience such a general disorganization as to render him of no further utility whatever as a buffalo. Still he would be caught, and that is exactly the object of the trap, to the representation of which, as applied to rats, we devote the annexed illustration.

The deluded rodent, shown on the left, takes the high road leading to destruction *via* the pivoted platform, A. In cheerful anticipation of a feast, he proceeds to the inner extremity of said platform and tackles the banquet, and probably places his paws on the swinging piece, B. Either touching the bait, E, or meddling with the swinging piece is, on his part, an unfortunate mistake, as the effect is to push back the curved catch, C, and so release the lower extremity of the latter from a lug, D, by which said catch supports the end of the platform. The victim's weight then overbalances the lead on the opposite extremity, and he immediately loses interest in the bait and devotes his mind to jabbing his claws into the platform with the vain hope of making his abrupt departure look as if it were less involuntary. Eventually he finds himself in darkness beneath, from which he may, at his convenience, emerge into the cage like apartment above, and regale himself by watching his relatives served in the same manner, or he may find profitable food for thought in speculating over the neat arrangement of the counterpoise or weighted end of the platform, which, after the victim is deposited, brings the latter back to a level position, when the catch again engages with the supporting lug, and the trap is ready for new prey. We doubt, however, if his conclusions would accord with ours, namely, that the trap is a very ingenious and useful little device; he might receive the further information, that it was patented August 25, 1874, and that State, county, and township rights are for sale, with disgust, and undoubtedly he would anathematize Mr. John Dildine, of Limestoneville, Montour county, Pa., who is the inventor to be addressed for further particulars.

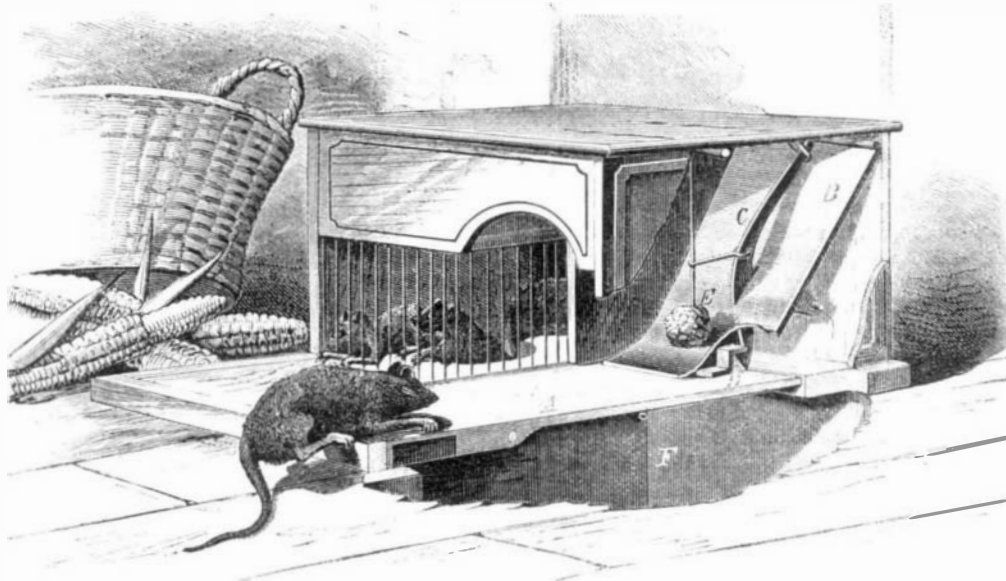
THE MANIPULATION OF PRUNING.

Lindley truly says: "Pruning is the art of scientifically removing certain branches, or parts of them." But except



by well educated and experienced gardeners, it is seldom, if ever, properly performed. Unless the operator thoroughly understands the principles upon which it is based, and the proper mode of operation, it is better to let Nature take

her own course, as less loss will then be incurred and less injury done. By ignorant men the simple operation of cutting off a shoot is almost always done in an injurious way. Some make a long "slivering cut," as in Fig. 1. Here the cut is begun too low down and is carried up too high, exposing the back of the bud to the weather and either killing it outright or causing it to make a feeble or weakly growth. Others, as in Fig. 4, cut "to the quick," producing the same evil effects. To avoid this, some make "snag cuts"—beginning the cut on the same side of the shoot as that on which the bud is placed, and thence sloping upwards from it, as in Figs. 3, 4, and 5. This necessitates going over the work a second time to remove the snags after the bud has



DILDINE'S ANIMAL TRAP.

made a growth, as the young growth cannot cover the dead snag.

The proper cut is shown in Fig. 6. It is called the "clean cut," and is made by cutting at an angle of 45°, beginning at the back of the bud, and finishing slightly above it. When pruned in this way the wound readily and rapidly heals, and commences to be covered with new wood as soon as the young bud pushes into growth. Pruning should always be



Fig. 7.

done with a keen-edged knife, holding the shoot in the left hand, and making one sharp, quick draw. The knife is a far better instrument with which to perform the operation than pruning shears and scissors, as these necessarily bruise the bark, at least on one side. Shears or scissors may do for rose bushes and common shrubs; but for grape vines, fruit trees, and greenhouse plants, the knife is the only proper instrument. Many persons advocate fall and winter pruning, but we think it will be seen, by referring to our engraving, that the exposure of the bud, after pruning, to the drying cold winds, the severe frost, and the effects of sleet and snow, cannot but be injurious, and will either kill or greatly weaken it. Such has been our own observation. Hence, we recommend that the operation be delayed until the middle of February, and performed between that time and the middle of March.

The apple, pear, plum, and cherry, as a general rule, bear only on two-year-old wood, or on spurs from older wood. The young wood should, therefore, be shortened back but little—say one third, or not more than one half—as otherwise it will expend its strength only in forming new wood. We have seen numerous instances in which, because of the ignorance of the pruner, a pear tree, for instance, has had a top as thick as a broom, and borne scarcely any fruit, because the young wood had been cut back, year after year, to three or four buds. The tree should always be encouraged to commence bearing as soon as possible after planting; as

this has a tendency to prevent excessive growth, and as it is then comparatively easy of control, and will not require much pruning. The object of the pruning is to prevent the head becoming too thick, and to induce the formation of fruit spurs. The Morello cherry bears its fruit chiefly on last year's wood, and should therefore never be pruned back severely. As a rule, all cherries should be but sparingly pruned, as the use of the knife has a tendency to cause them to gum. Fig. 7 represents the growth of the wood of an apple tree, showing a bearing spur on the three-year-old wood, the blossom buds on the two-year-old wood, and the leaf buds on the last year's growth. In this, *a a a* represents the fruit buds, *b b b* the leaf buds, and *c* the scar from the fruit borne the last year. When, in the course of time, the spurs of any of these trees become too long, they must be shortened back to the eyes near their base. They will then throw out a new set of spurs.

The peach and the nectarine bear their fruit on the last year's wood. Hence all the pruning they require is to cut back this wood about one third of its length, thinning out all superabundant wood, but retaining enough in the center of the head to prevent the mass of the fruit being borne towards the ends of the branches, in which case the branches may break or split with the weight, to the great injury of the tree. As the trees are thrifty growers, a little consideration will direct us how to obtain a symmetrical and balanced fruitful head.

Of all the fruits cultivated by man, none has been so twisted about, so tortured, by systems of training, pruning, and feeding, as the grape vine. Were it not possessed of a constitutional vigor and a power of recuperation common to few, if any, other plants, it would long since have disappeared from cultivation. The books that have been written about it would make a small library. Each author inveighs against every other system of training or pruning, and declares his mode the only correct one, and it alone the one which should be universally adopted. Each forgets that the vine grows and produces fruit in almost every soil and climate, whether on the rocky sides of mountains where the thermometer goes down to zero, or upon the alluvial savannahs of Demarara, and subject to its equatorial heats.

While the vine produces its fruit on the new growth of the current season, the main requisite for its successful cultivation is the formation of moderate-sized, healthy, well ripened wood of the previous year—such as will furnish one or more strong eyes for the new year's growth. All the systems of training and feeding that have been invented have this object in view, and all the various modes of pruning resolve themselves into the procuring of two eyes or shoots—one for the production of wood for future use and the other for the immediate production of fruit. This is best brought about by the spur method, in which a shoot from a strong cane has been pruned back so as to produce two shoots, only one of which was allowed to produce fruit the last season, as shown in Fig. 8. Here the upper shoot was the fruit bearer, and the lower one not allowed to bear. Now we cut back the upper one on the line *a*, and the lower one on line *d*. From the bud on the lower shoot will come a fruit-bearing shoot for the current season, and the bud, *b*, will make a growth shoot to produce fruit the next year. The present lower shoot will then be cut away, as the upper one has now been—and so on year after year. If the bud, *b*, should be developed at *c*, instead of in its present position, it will make no difference, as in all probability a bud will be developed on the upper side, next year, from which to get a growth shoot, the one beyond it making a fruiting shoot.

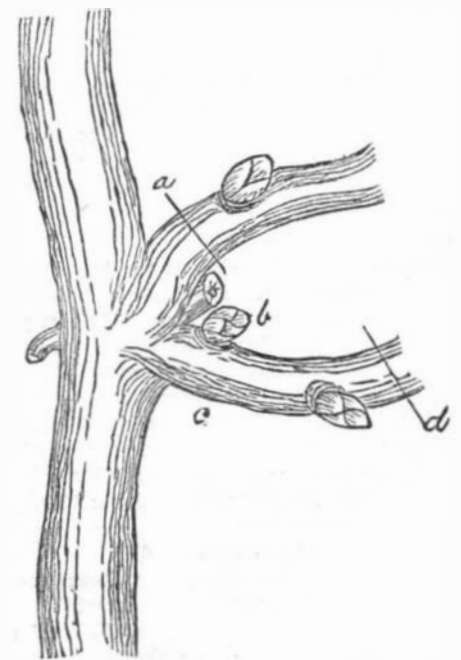


Fig. 8.

In a single article we can only give a few hints, or a general outline of how the operation of pruning should be performed.—*The American Garden.*