

Grape Vine Culture.—No. IV.

THE ARM SYSTEM.

WHAT is called the arm system, is in extensive use, chiefly in the State of New York. The first and second year, only a single cane is allowed to be grown to a single upright stake, as described in our previous observations on the "single stem dwarf and renewal system." In this, as in all other methods and systems of grape vine culture, the pruning knife should at all times be kept very sharp, steadying the plant with the left hand, and then making a short, clean, quick cut with the right, so as not in any way to disturb the roots. The appearance of the vine pruned and ready to lay down in the fall, at the end of the second year, is indicated by Fig. 14.

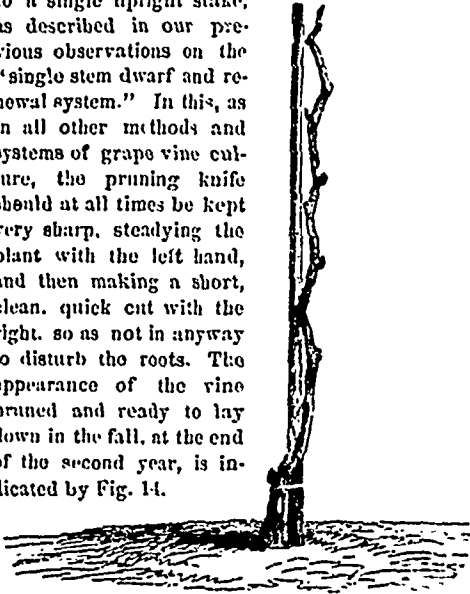


FIG. 14.

The third season, the vine should be allowed to grow two arms, somewhat in the form shown by Fig. 15. The same upright stake is to be used as before, but an addition must be made for a cross piece at the top and two side supports. Almost any kind of material will answer for this purpose. The following season, the vine will require a permanent support,

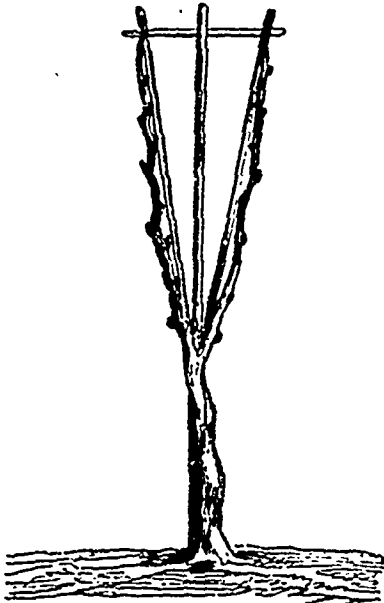


FIG. 15.

in the form of a trellis. This may be made by setting posts ten to fifteen feet apart, and wire may be stretched on these posts, in the way previously stated. But another kind of trellis, said to be somewhat more convenient, is made by nailing a horizontal slip of wood, two feet from the ground, and another on the top of the posts, and these strips are connected by other strips of wood precisely after the form of a picket fence. See Fig. 16.

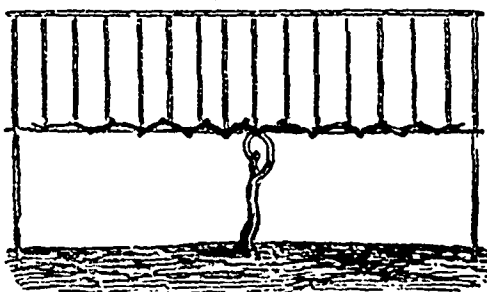


FIG. 16.

Spring is the best time to erect the fence. The arms it will be perceived, are reversed by bending round and this should be done about the 1st of May. These arms are to be firmly tied to the lower slip or bar, by soft twine, in order to keep them in position. The reason for this bending, is to retard the flow of sap to the extremities, and the buds are consequently materially strengthened near the centre. The first season, by this method, the vine will produce specimens of fruit, but not more than one bunch should be allowed on each shoot; the others must be taken off—and even this is quite a heavy crop for so young a plant. The shoots grow up as shown in Fig. 17; and

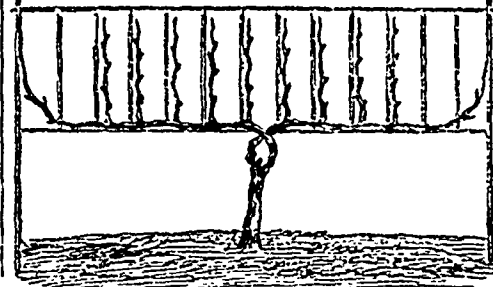


FIG. 17.

should be stopped when they reach the top of the trellis. The shoots shown in a slanting position at each end, are intended to form the extension of the arms. The ground should not be much trodden down, but kept loose, and free from weeds and grass, and perhaps a light dressing of well-rotted barn-yard manure, or bone-dust, ashes, or a compost of all three may be lightly forked in in the fall or early spring. During the growing season, weak liquid manure may be used to great advantage. At the end of this season, the shoots must be all pruned down, with the extension of the arms, as shown in Fig. 18.

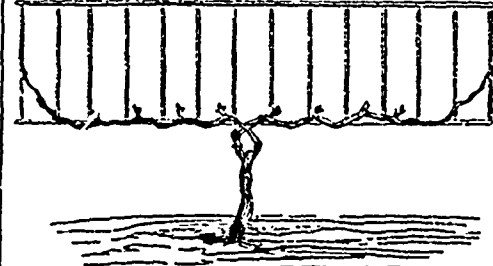


FIG. 18.

This system is said to answer admirably in the State of New York; the only difficulty with its adoption in Canada, would be in laying down the vines for winter protection. This would be a somewhat difficult matter, in order to avoid breakage, and for the purpose a large quantity of straw, or pine top from the bush, would be necessary to cover them. The vine may now be considered as established. After a few years' fruiting, the arms will become unsightly, and require to be cut down, and a season's fruit will thus be lost, but the vine itself will be greatly improved. One season will again produce wood, and afterwards may go on every alternate year as before.

DR. KNOX'S METHOD.

One of the largest fruit growers in the United States is the Rev. Dr. Knox, of Pittsburgh, in Pennsylvania, who has, for instance, 50 acres in strawberries, and almost as many in grapes; who is, moreover, a nurseryman on an extended scale. His method of culture, abridged from his own speech at a fruit growers' meeting in New York, is as follows:—He thought grape culture had been injured by its friends, who advise the expensive methods of digging the soil three and even four feet deep, with heavy manuring. All this was not only useless and expensive, but positively injurious. It was well known that foreign sorts were not adapted to out-door culture on this continent, and neither were the methods of foreign cultivation; fifteen to twenty inches was as deep as the soil need be stirred. He invariably pruned his vines in November. The first season he cut down to

two eyes. The second year all but one cane; and the third fall, that one back to three eyes: these produce three strong fruiting canes for the fourth year, two of which are bent to form the arms, and the middle one trained upright, as shown in Fig. 19.

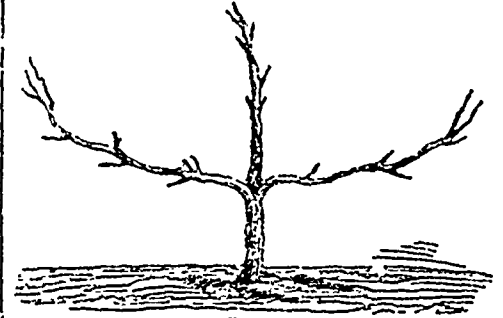


FIG. 19.

The trellis was not required to be erected until the fourth year, when he calculated that each vine produced not less than ten pounds of fruit, besides throwing up alternate canes for future fruiting. The process afterwards consisted of cutting out each alternate upright shoot every year. Suppose eight vines in all,—four produce wood, and four bear fruit alternately. See Fig. 20; a a, dotted lines, are

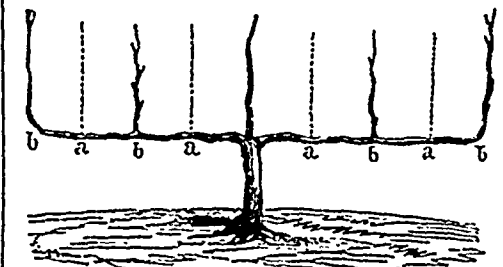


FIG. 20.

the wood producing canes, and b b b the fruit bearing.

The following season, the canes are just reversed, see Fig. 21.

The wood canes are pruned every fall, and those that have borne fruit, cut down to two eyes. He planted eight feet apart in the rows, and the rows about six feet, thus requiring about one thousand

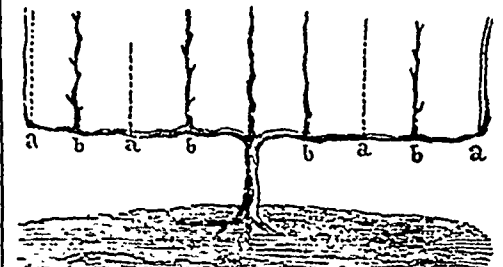


FIG. 21.

vines per acre. The trellis posts are about nine feet apart, fastened to upright slips of wood, somewhat resembling in appearance a picket fence. See Fig. 22. During the summer months, the new growth of

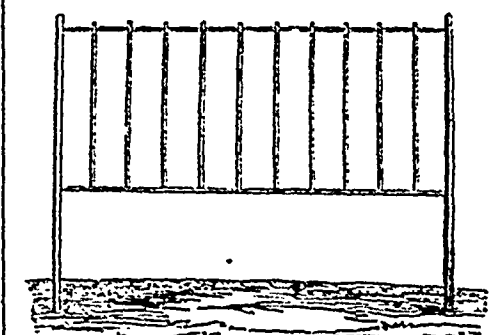


FIG. 22.

the spurs is pinched in, retaining as many leaves, beyond the last cluster, as there are clusters on the spur. This method is generally known as the "double spur system."