

## EXPEDIENTS FOR PROMOTING FRUITFULNESS IN PLANTS.



ALL expedients for inducing early fruiting are founded upon the well-known law that excessive growth and great prolificness can not simultaneously exist in the same plant. Some of the most familiar modes of inducing fruit are as under :—

## BY DWARFING.

In horticultural parlance, trees are said to be dwarfed when grafted or budded on stocks of weaker growth than themselves. Thus we have the pear on the quince, the cherry on the mahaleb, the apple on the Paradise stock, the peach on the plum, etc. This is a popular and efficient mode of rendering trees fruitful. Properly speaking, any low tree is dwarfed ; the term when applied to a system is merely technical.

## BY BENDING THE BRANCHES.

This process practically consists in allowing the branches of a young tree to grow undisturbed by the pruning knife for several years until the plant attains considerable size ; the young shoots are then bent down and secured to pegs fastened in the ground. This mode is eminently adapted for standard pear trees, especially such varieties as Dix, Bartlett, Sheldon and others that make long yearly shoots. These when bent down soon become studded thickly with blossom spurs, and very ornamental and symmetrical trees can be formed by a little attention to the bending and regulating the shoots ; the pendent form soon becomes fixed, and trees so treated are certain to be productive. The proper season to commence tying down is the month of August ; the young wood will then be sufficiently matured to bend, and many of the most forward buds will form short fruit spurs, and bloom the following spring. Trees and plants of all kinds can be incited to flower and fruit, no matter how luxuriant their growth, by careful observance of the bending process. Horizontal training is a modification of this system, and is a well-known method of encouraging fruitfulness.

## BY PRUNING THE ROOTS.

When a tree has reached a fruit-bearing size, and shows no symptoms of a fruit-bearing disposition, but instead throws out vigorous branches, root-pruning is a very efficacious mode of checking growth. In highly cultivated gardens where trees are planted and the roots have access to the rich soil, an immense crop of branches will be produced, but little if any fruit. Root-pruning will check such growths most effectually and render the trees fruitful. The operation is performed by digging out a circular trench at a distance of from three to six feet from the stem, according to the size of the tree, and cutting all the roots that are encountered or can be reached. The soil is again thrown back and the