

Fig. 12 shows the same type of branch in blossom. Notice that each spur has an ample supply of leaves to develop its fruit. This branch was much more "mature" for its age than Fig. 11. Notice also some terminal bloom on the new wood. This latter bloom by chance may develop fruit. Notice also that no blossoms are found on the new or one-year wood.

Fig. 13 shows the same type with its crop of fruit. Here it will be noticed that the development of each fruit seems to be in proportion to the amount of leaf surface growing on the spur.

Fig. 14 is an old and well-branched fruit spur found on the older branch of a tree. The exact history can be read owing to its habit of producing fruit from terminal buds. The bud that continues the growth of the spur arises from below the fruit during the year the fruit is being borne, and so causes the spur to have a zigzag appearance. A, B, C, and similar scars, show where the fruit has been borne. Each bud will ordinarily produce four or five blossoms and as many leaves, and at the time of opening will grow out an inch or more. These buds are not always fruit buds, as reference to Fig. 15 will show.

This is a similar spur and shows only two of these buds as being fruit buds. This condition on the individual spurs is largely controlled by the condition of the tree at the time these buds are being formed the previous year. Where there is an extra crop of fruit to call largely on the resources of the tree, nature has made provision that only a few fruit buds shall develop, and the remainder will be leaf buds. This creates a tendency towards the biennial habit of bearing.

Fig. 16 shows a spur similar to Figs. 14 and 15 in fruit. In this case, most of the leaves have been cut away and the buds may distinctly be seen. Notice the continuation of the spur in the long new wood at the left.

Figs. 17, 18 and 19 each shows a branch of a mature tree. It is obvious that such branches will need no pruning except for purposes of thinning the fruit. Here again each spur does not produce a cluster of blossoms. In some cases they may be seen to produce a small branch one or two inches long in the season; such a one, for instance, may be seen in Fig. 16, below the fruit at the left. The fruitfulness of each spur is controlled by conditions of the previous season, for if it could not then produce a fruit bud, none but leaves can arise the following season; in this season, however, it will make a very short growth of an inch or two and set good strong fruit buds.

Study figures 17 and 18 together. They are excellent illustrations of the general fruiting habit of the average mature but thrifty pear tree. Though the two illustrations are not from the same branch, Fig. 18 will illustrate where blossoms would have formed on Fig. 17.

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### SPRAYING.

Ordinarily pears should be given three sprayings the same as the apple, at about the same time, with the same materials and with the same degree of completeness and efficiency.

The first spray must be applied to the dormant wood. It is generally considered advisable to delay this as long as possible, or until the buds have begun to burst, if aphids have been present until the eggs have begun to hatch. Use the winter strength lime sulphur 1.03 specific gravity to each forty gallons of which have been added one-third pint of Black Leaf 40 or nicotine sulphate.