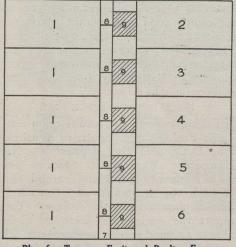
A Plan for Raising Poultry Among Fruits

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COMBINED system of poultry and fruit raising may be outlined as follows. Take ten acres of good land. Sandy loam is most desir-Run a division thirty feet wide through centre. Divide each half into five equal parts. (See the diagram). In the space opposite each division build a poultry house twenty feet wide and the desired length for 200 poultry making a



Plan for Ten-acre Fruit and Poultry Farm

1, About one acre in each division, containing apples, 40 feet apart each way, with plums, pears, peaches and cherries half way between the rows. Remove these fillers when apple trees need the room, say, ten years after planting. 2, Black currants. 3. Red currants. 4. Gooseberries. 5, Red raspberries. 6, Black raspberries. 7, Driveway, ten feet wide. 8, Temporary gates that can be opened or taken down when fowl are to run in divisions on that side. 9. Poultry houses.

total house space for 1000 fowls. In each division on one side of the central space, plant small fruits, such as black currants, red currants, gooseberries, red raspberries and blackberries, and in the division on the other side plant pears, plums, peaches, cherries and apples. Do not plant strawberries, as this system would not be beneficial for them. The best breeds of fowl in my opinion are Barred Plymouth Rock, Minorca, Wyandotte, Orpington, Brown and White Leghorn.

Have the houses so constructed that the fowls may be let out into each division. Divide the divisions with wire netting as high as is required.

As soon as the soil can be worked in spring, cultivate between the rows of fruit and sow every morning the fowls' morning meal which should be grain. Good wheat is preferable to anything else in this line. Let the fowls work for their living by scratching and gathering their food. Exercise is good for them, and if the soil is fairly dry they will dust themselves. The noon meal should consist of soft feed, such as bran mash, scraps from dining table, and so on. A little pepper is good. In the evening feed the grain by sowing as in the morning. On the other side plow and culti-

vate as soon as ground is dry and sow to grass seed or any other green crop or to grain.

As soon as the small fruits start to bloom shut off the runs into the small fruit divisions and let the fowls run in the divisions on the other side. When the small fruit is all gathered, change the runs to the divisions on the small fruit side. Then sow buckwheat in the spaces between the pears, apples, etc. As soon as any grain appears, change the runs again or let the fowls use both sides.

Plow the buckwheat under as a cover crop before frost sets in for the benefit of small trees. A few mangels can be grown for winter use as they are very beneficial as a regulation in winter time.

The fowls running on the land between the trees and bushes will fertilize them as well as destroy millions of insects which would otherwise be destructive. The production of eggs can be counted as a clean profit as the fowls would pay for themselves in the benefit the fruit would derive from them.

Spraying the Vineyard

In the course of an excellent address on "Grape Growing in the Chautauqua Grape Belt," Mr. D. K. Falvay, Westfield, N.Y., gave the Ontario Fruit Growers' Association at its last convention the following information on vineyard pests and spraying:

"All vineyards should be sprayed at least twice for the 'root worm' and several times if affected with rot. Poisoned Bordeaux is used for the fidia or root worm, and also for the grape berry moth, which produces wormy grapes. The first application is made when the grapes are just past full blossoming, and the second application is made about ten or twelve days later. The material costs about \$1.30 cents an acre for each application if poison is used with the Bordeaux; with Bordeaux only, about 70 cents an acre. With water handy and a good walking team two men can spray fifteen acres in a day. From ten to twelve acres a day is, however, a fair

"The benefits from spraying are many. It will control the root worm, destroy the grape berry moth, prevent mildew, check black rot, prevent grapes shelling and keep the vines healthy. Sprayed vineyards have a better growth of foliage, which stays on the vines from one to three weeks longer than on unsprayed vines, thereby fully ripening the fruit and the wood.

"The 'thrip' or leaf hopper has damaged thousands of acres. This insect works on the under side of the leaf. It sucks the juice after the leaves fall but

remain red and unmarketable. The leaf hopper can be controlled by spraying the under side of the leaf with whale oil soap, using from twelve to fifteen pounds to 100 gallons of water. This should be applied before the hopper gets wings: Last season I killed seventy-five per cent. of the hoppers by this treatment.

"The most serious pest with us is the root worm or fidia, which has ruined thousands of trees in the grape belt. This



Hand Power Barrel Spraying Outfit Manufactured by Goulds Manufacturing Co., Seneca Falls, N. Y.

year it was not so much in evidence. As a result of experiments by the state of New York it was demonstrated that the root worm can be controlled or at least reduced in number below the danger line. This work is performed by hoeing out the pupae when in the turtle stage, and by spraying just before the beetles feed on the leaves. Vineyard work should be done intelligently and at the proper time. No business will run itself.'

The native black currant of Saskatchewan, though different in flavor from the cultivated sorts, is fully as palatable, and yields much better.

Orchard men in the strictly dry belt of British Columbia claim an advantage over slightly wetter sections where summer rains are not heavy enough to soak the ground yet necessitate much cultivation to preserve a dust-mulch to retain the winter moisture or irrigation water. Practical orchardists hold that after the one, two or three (in the case of an open soil and a bearing orchard) irrigations necessary, a stir with harrows every ten days or two weeks, keeps so perfect a mulch that trees can bring large crops to full size even in the dryest season.