before they have commenced to grow. As at present advised the most efficient means of doing this is to spray the trees in the spring, once before the buds burst and again just as they begin to unfold, and before the flowers open, with *modified eau celeste*; after the blossoms have fallen to spray them twice with *Bordeaux mixture*, to which Paris green has been added in the proportion of ¼ lb. to 50 gallons of the mixture. If the weather is dry, an interval of ten days to two weeks may intervene between the sprayings made before the blossoms appear and between those after the flowers have fallen; but if it is rainy it will be necessary to spray oftener, even to giving a spraying every week, making three with the *eau celeste*, and three with the Bordeaux mixture and Paris green.

Modified eau celeste is made by dissolving two pounds of copper sulphate (blue-stone, blue vitriol) in hot water, say two gallons. Do not use an iron or zinc vessel. A convenient way will be to put the blue stone into a water-tight barrel and pour the hot water upon it, and stir with a stick occasionally until it is all dissolved. In another vessel, no matter of what it is made, dissolve one pound and a half of carbonate of soda (common washing soda), in say a gallon of water, cold or hot as is most convenient. When both of these have become wholly dissolved, pour the soda solution into the barrel containing the solution of blue vitrol. When the chemical action which will now ensue has ceased, pour into the barrel one quart of ammonia of the strength of 26°, and stir the liquid. In a short time there will be a clear blue solution. Now add enough water to bring the whole up to thirty-two gallons. If convenient to use rain water it is preferable.

Bordeaux mixture is made by dissolving six pounds of copper sulphate in say five gallons of hot water. Take four pounds of fresh caustic lime, adding water enough to make a thin white-wash; fasten a piece of coarse sacking over the barrel containing the solution of blue-stone, and strain the thin white-wash into it. When this is done add enough water to bring the whole up to forty gallons. The cost of this will not exceed one and a half cents per gallon. It is necessary to add the lime in order to prevent the copper sulphate from injuring the foliage.

In order to kill the apple worms before they have time to eat their way into the apples it is necessary to add Paris green to poison the worms. The proportion that is advised is at the rate of one pound of Paris green to two hundred gallons of water. This would require six and two-fifths ounces of Paris green to be added to the forty gallons of Bordeaux mixture. Six ounces, however, will be found to be sufficient. By thus combining the poisonous Paris green with the copper sulphate, we are able to kill two birds with one stone; to prevent the fungus from making the apple scabby and the young worms of the codling moth from spoiling the fruit.