

and spring. If then wanted for out-of-door planting, they should be planted in the open ground after it has been prepared as directed. When roses are received from the florist at the planting season they should be shaded from the sun for a few days after planting, as being boxed when sent by mail or express, they require this protection from the bright sunlight until they get partly established in the ground.

Roses are described in catalogues under the head of Hardy Hybrid Perpetuals, Hardy Climbing Roses and Tea or Monthly Roses, so that the buyer will be able to distinguish to what class they belong and have them treated accordingly, or order from such classes as are best suited to the district in which they are to be planted.

Hybrid Perpetuals and Hybrid Teas will stand the winter with but slight protection (by a covering of four or five inches of dry leaves, or straw and earth, in November), but Teas, Bourbons or Bengals, which are all of the tender Monthly class, would not be hardy in any district where the temperature falls lower than 25 degrees below the freezing point. Such roses, when grown in the north, can be lifted in October or November and placed in pots or boxes, and if given plenty of light, such as being placed in a light sitting room or in a green-house, will bloom throughout the winter.

[TO BE CONTINUED.]

Paris Green as a Remedy for the Curculio and Codling Moth.

BY F. G. H. PATTISON, GRIMSBY, ONT.

Paris green used in proper quantity and at the right time is a very efficacious remedy for these insect pests. The fact is not so well known amongst farmers and fruit growers as it ought to be. If it were, the large amount of wormy fruit now to be seen upon our markets would be materially lessened. It was first used, I believe, on the other side of the line some eight or nine years ago and soon spread into Canada. The number of those spraying with it is increasing every season.

The writer first began to use it about five years ago, and is convinced from repeated experiments that a proper use of it will save from 50 to 75 per cent. of the apple crop; about the same proportion of the cherry and pear crops, and in the case of plums will, most seasons, make all the difference (at all events in many sections) between a full crop and none at all.

You may jar your plum trees every morning for about three weeks and catch the insects in cloths, but most people consider this a rather tedious operation, especially in this age of steam, electricity and labor saving implements.

You may also grow your plum trees in a chicken yard, but this, while it may answer well enough for a private grower with a few trees, is impracticable for a large commercial orchard.

The poison should be applied to the trees by means of a force pump fixed upright in a barrel by screws fastened into the lid, and provided with a hose and muzzle. These pumps are easily procurable, both in Canada and the States. Prices range from about \$3.50 up to \$12 and \$14, according to power, &c.

A 40-gallon barrel is a convenient size, but a larger or smaller one can be used if preferred. A small portion of the lid should be removed to allow the water being freely and easily poured into the barrel, but not more than is necessary in order to avoid any spilling or splashing.

The barrel and pump should then be placed in the vehicle prepared for it (a Democrat or one-

horse cart is preferable, but a wagon will do) and firmly fixed there by means of ropes or chains to prevent shifting.

It requires two men to work the apparatus properly, one to drive and spray, the other to pump and stir, for the water must be kept constantly stirred, as otherwise the strength of the Paris green will all go to the bottom.

Caution must be observed, however, in using this poison, as, if used too strong, it will destroy the foliage and, perhaps, kill the trees, whilst if used too weak it will not produce the desired effect. The following are about the proper quantities if the Paris green be pure:—

For apples and pears, one ounce to twelve gallons of water. After spraying for some time slightly reduce the quantity, as there is always a sediment left in the barrel each time it is filled, so that if the quantity of fresh poison added be not slightly reduced, the mixture will gradually grow stronger than at first. For plums and cherries one ounce to thirteen gallons will be quite strong enough.

In purchasing the Paris green care should be taken to obtain a pure brand, as several of the brands now placed on the market are much adulterated and of inferior quality.

If the trees in the orchard are of good size, drive up one side of each row, spraying, and again down the other side of the same row, still spraying. By this means each tree will get a thorough dose of the poison, and it will be evenly distributed all over it, which is important. In the case of small trees this will not be necessary.

The proper time for spraying varies a little for the different kinds of fruit. Apples should be sprayed twice; first when about the size of finger ends; second, just before the apple turns over to hang down.

Cherries soon after the fruit sets; repeat in a week or ten days' time.

Pears should be done earliest of all, as the Curculio, generally speaking, makes its first appearance upon them and is the cause of the numerous gnarly and twisted specimens to be seen in our orchards; repeat as for cherries.

Plums, first application immediately after the blossoms drop; repeat at intervals of from six to ten days, for from four to six weeks, according to the weather, but where there is not time for so much, two applications, or even a single one, will be found very beneficial.

Care should be taken to select settled weather, if possible, for if heavy rain follow within 24 hours after the application, it will render it of little or no use, the spraying will have to be done over again. There is little or no danger to be apprehended to live stock from feeding on the grass in an orchard which has been sprayed, even immediately after the application. This has been proved over and over again by actual experiments.

To be on the safe side, however, an interval of from four to five days may be allowed to elapse after the application before turning live stock into the orchard.

In conclusion, I do not hesitate to say that there is nothing a fruit grower can occupy his time with—more especially if he be possessed of a plum orchard—which will return him better cash results in the same season than the proper application of Paris green to his trees.

The farmer who keeps dairy records does not complain so much about low prices as the man who does his work by guess or at random. The study of figures will often indicate a remedy for low prices.

Poultry.

Poultry Breeding.

That every farmer should invest heavily in pure bred poultry is not advisable, not that mongrels and dunghills are as profitable as pure bred birds, for experience demonstrates that they are not, but because in any case it is best to creep before walking, and to invest in an expensive flock of fowls without having a knowledge how the money is to be made out of them is a great mistake. Pure bred birds cost big money, and are not likely to yield a profit if their eggs are used for the table or their flesh sold on the market, notwithstanding the fact that in most instances they are best for that purpose. If pure bred fowls are to be kept, they should be made to yield a good return by selling eggs for hatching and young birds for breeding purposes. There is no reason, however, why any farmer should not invest in a sitting of eggs of some pure bred variety best adapted to his wants, or even a pair or trio of pure bred fowls as a nucleus for a good flock. Few lines pay better in Manitoba than poultry, and the best only is "good enough." Where this is not convenient or practicable, the best hens should be selected and bred to a pure bred cockerel. From the chicks of this mating select the largest pullets and breed them to the same male the next season. The chicks will then be three-quarters pure, and another cockerel of the same breed used in the same way will make the flock to all intents and purposes pure bred.

Poultry Culture.

BY JAMES ANDERSON, SPRINGFIELD FARM, GUELPH, ONT.

The rapid strides which have been made in poultry raising in our Dominion during the last decade is something wonderful. Some eight or ten years ago our Ontario Poultry Association was formed, and a government grant of some \$600 annually was got through the influence of our late member, the Hon. Peter Gow, which gave a great impetus to scientific poultry culture. Now we have established all over the

Dominion well conducted and prosperous exhibitions of poultry, counted by the score, which seem to succeed without the aid of government support, showing the great interest there is taken in the business. In looking over my Poultry Review I find the names of some ninety professional breeders of poultry advertising there, a great many of them making their living by poultry, and all seemingly making money by it. The number of eggs exported last year from Canada was something fabulous. In the December number of the Poultry Review I read:—

"A special egg train of 24 cars passed over the Grand Trunk on Saturday for New York via the Delaware, Lackawana & Western Railway. These trains are guaranteed to make the run from Hamilton to New York in 25 hours. The shipment was a single consignment from Strathroy, Ont., and the total number of eggs in the consignment is over 31 millions." Now, you may imagine when from one locality this number is shipped, what must be the wealth from eggs alone obtained from the whole Dominion. I also read in the FARMER'S ADVOCATE for March that no less than 70 tons of Canadian turkeys were shipped in a single day last fall for the Liverpool and London markets. So you will see by this that if the poultry business does not interest the