and the pouch washed out with an antiseptic solution. The reason for this is that if a blood-clot collects in the pouch septicæmia supervenes, and death follows. The testicles and pouch-ends should be placed in a receptacle provided for this purpose. As soon as castration is completed the tail is grasped and severed with one clean cut. The cut is best made two or three joints from the stump; the joint can be felt by the finger and thumb. A weak disinfectant should be applied to the wounds before releasing the lamb.

The knife used for tailing should be a separate one from that used for opening the pouch. The knives and operator's hands should be dipped into the antiseptic after each operation. After the work is concluded the tails, testicles, and pouch-ends should be collected and destroyed by fire.

When marking is finished the ewes and lambs should be placed on good clean pasture with sufficient growth to keep the lambs' tails or pouch-ends from coming into contact with the soil. If these precautions are strictly observed any mortality from castration and docking should be reduced to a minimum.

—F. Mackenzie, Live-stock Division.

THE ORCHARD.

THE experience of the past season has proved conclusively that the Dominion markets are easily oversupplied with low-grade fruit; in fact, the demand for this grade at present is very limited, and fruitgrowing is not a profitable proposition unless the percentage of such fruit is kept down to 10 per cent. or thereabouts. Growers who have been unsuccessful in realizing this ideal should take courage from the fact that many are attaining it consistently year after year, and should again make an earnest effort. The reason for such success is not a secret, but merely lies in doing the right thing at the right time and doing it well.

SEASONAL SPRAYING.

Specially does the foregoing statement apply to orchard-spraying. Most of the pip-fruits are graded down for black-spot, and the stone-fruits for brown-rot, both diseases that can be controlled by proper spraying. Effective control requires the trees to be in good heart and the correct sprays to be applied at the right time. Again, the results of such a campaign largely depend on the initial effort. Black-spot and brown-rot fungi commence their new season's growth at the same time as the trees on which they live, and if they are allowed to establish themselves before preventive measures are taken the battle is lost, or, at best, the results will be unsatisfactory.

To prevent the loss of laterals, spurs, and fruit through brown-rot on apricot, peach, and stone-fruit trees generally, follow up the spray recommended last month with a further application of bordeaux, 8–6–40, as the blossoms commence to open—usually early in the month of September. Owing to the variable quality of quicklime it is always desirable to test bordeaux that is about to be applied to trees in growth; should there be any sign of acidity more milk of lime must be added until this is neutralized.

Towards the middle of this month pear and apple trees commence to resume their growth. Just before this takes place the first fungicide spray for the prevention of black-spot must be applied. In the districts and localities where this fungus gives comparatively little trouble, and probably powdery mildew and red mite are the worst offenders, the fungicide used may be lime-sulphur concentrate, 1 gallon to 10 gallons of water. In applying, close down the aperture of the spray-nozzle somewhat and give the job plenty of time, covering branches above and below. Where black-spot has been troublesome use bordeaux, 8–6–40, at the same period in place of the lime-sulphur, using the greatest care in mixing and applying. Should the trees also be affected with scale insects, aphides, or red or blister mites, follow this application almost immediately with red oil—1 gallon to 15 or 20 gallons of water—taking care that a good emulsion is obtained. These are the most important sprays of the year, and a clean crop cannot be harvested without them.