

the times, and the demands from a more and more discriminating public, as to the quality of their food supply. We must remember that as a rule we make improvements just in proportion to the interest and application devoted to the calling or business we follow, and just in proportion will our financial success be determined. Then by practical efforts we may minimize our losses in apples or other products. For anything that is worth doing, it pays to do it well.

In passing, just for the sake of illustrating our probable losses in this fruit, permit me to attempt an approximate estimate of the quantity of apples marketed in Lindsay, grown within a radius of, say, 15 miles. For want of any definite information I will say in this circle we have 3,000 growers, and the average product for sale during a good fruit year will be five bushels each, or 15,000 bushels, and it would be safe to estimate that fully half would not pass inspection as No. 1 fruit. Then 7,500 bushels will be second and third class fruit, and subject to a deduction of at least 10 cents per bushel. If this is permissive, then the fruit growers in this section would sustain a loss on this one product of \$750, much of which might be avoided and ultimately will be, when competition and education have filled their mission along this line. Now a deduction of 10 cents per bushel for inferior qualities is a low estimate, as you would readily admit, referring to the quotations of reductions made on a barrel when it is found a little slack, or off quality, in the English apple market; it is subject to a most unreasonable reduction.

But permit me to give you another and more practical demonstration by way of a comparison. Suppose a Mr. Jones and a Mr. Smith live on adjoining farms, and each brought to market for sale one barrel of winter apples. Mr. Jones' fruit had received good cultivation, was carefully hand picked, selected, and properly packed in a new barrel, firmly pressed and headed up, and deservingly branded XXX. with Mr. Jones' name stencilled thereon, while Mr. Smith's apples had been grown in a neglected orchard, gathered carelessly, dumped into a barrel that had been in use, without being selected or headed up, sent six or eight miles to market in an ordinary farm wagon (badly bruised of course on the passage), and presented to the same buyer as Mr. Jones sold to. Now Mr. Jones' barrel would be probably worth \$2.50 or more at this season, while Mr. Smith's would only bring \$1.50, and the buyer would prefer the best quality every time, and so would the majority of his consumers. Now, sir, here is a loss of three times 10c. per bushel, and I think you will admit that it is correctly estimated.

In closing, permit me to intimate (with all due deference to growers) that the object of this paper is to en-

deavor to show that to some extent there is yearly an avoidable loss to many apple growers in this district for want of attention and care in growing and marketing this, the king of fruits and the fruit of kings, lords and peasants.

### The Care of Breeding Ewes.

By James Tolton, Walkerton, Ont.

It would be folly on my part to lay down any hard and fast rules for the management and care of the breeding flock, that would apply to the whole province. In the first place, climate, locality and nature of the soil have very much to do with the production of feeds that are profitable and suitable for the feeding of the flock. So that in what I say about the care of the breeding flock can only be in a general way. First, get the flock. If it is to be a purebred one, see that you have the type and character of the breed, that they have constitutional vigor, and that there are no culls, or ewes that are too old, for when a ewe begins to lose her teeth she is getting too old to be profitable. If it is only possible to have a grade flock, much the same conditions will apply. Aim to have them about the same type and be sure that they have constitutional vigor, for upon this much will depend as to your success or non success with them.

Now suppose it is about the mating season; the flocks should be carefully looked over, and if in too low or thin condition from suckling one or two lambs the preceding season, they should be put on better feed, so that they may be gaining in strength and flesh during the breeding season. By attending to this the offspring will be more vigorous and there will be a larger proportion of twin lambs. Another thing, a small matter apparently in itself, watch for parasites that sheep are subject to. I mean the sheep tick and sheep louse; if they are infested with them they should be during the warm days of the fall, dipped, or have poured over them one of the antiseptic non poisonous sheep dips that are now obtainable at almost any drug store. It is of vital importance that the sire that is used should be purebred. If he is to be used on a purebred flock, he should be of the same breed as the flock. If on a grade flock, of a breed that best meets the requirements of the owner, and the flock; that is, in some localities a fine wool breed would be more profitable than a long wool breed, and *vice versa*. After making the selection of the breed, next comes the selection of the individual animal. He should have the type and character of the breed, he should be robust, vigorous and of a masculine character. The time of mating depends largely on the locality and the use the flock is to be put to. It should be regulated

so that the lambs may dropped in comfortable and dry quarters, or else not before the weather has become warm and the fields are partly dry. It is better to apply some kind of marking on the sire's breast, so that he may leave his mark of service. This application can conveniently be put on when he is going to his grain ration which he should have daily while in service. There are two objects in this marking process. You can know for certain in two weeks if the service is effectual, and you can keep a record of service and if necessary make suitable arrangements for the ewe dropping her young. In some parts of America no protection against the inclemency of the weather is required. In others suitable buildings are necessary. But in no case need they be expensive, all that really is necessary is that the flock be kept dry, protected against draughts and have plenty of pure air and exercise. It is proper here to say that the flock, particularly the long wools, should be protected against the cold and drenching rains that we sometimes have during the late fall.

FOODS.—Now about feeding and foods. The natural habit of sheep is to run at large and pick its food from the grasses or other feeds, and the nearer to nature we can keep along this line the greater will be our success. But sheep as well as other of our domestic animals, will accommodate themselves to confinement and prepared foods, and none of our domestic animals respond to generous treatment more readily than sheep. While we have winters we will not only have to provide protection, but suitable food for the flock. I have already observed that the ewe should have generous treatment during the fall. This may be done by having good pastures of clover or other grasses, or by providing some rape, and during the winter giving plenty of good sweet clover hay. Where peas and beans are grown the straw of these grains can take the place of the hay to some extent, say one feed per day of hay and two feeds of straw, or vice versa. In addition to the hay and straw a breeding ewe should have two or three pounds of roots per day, the quantity being increased as parturition draws near, and after that period give her as much as she cares to eat. The ewe should also be fed during the winter some grain for at least two months before dropping her lamb. One to two pounds is sufficient. I think, perhaps, the most suitable grain is oats or oats and peas mixed, and where peas are not grown, corn can take their place. Where roots cannot be conveniently grown wheat bran will take their place to good advantage; in fact, for increasing the flow of milk, no food will excel wheat bran. Sometime before the ewe is shorn she will be put on fresh and succulent grass. Before this is done she should be tagged, or the wool clipped from between her hind legs, to