

Microbes abound in myriads about fold yards compared with the open fields, and the severed glands of freshly castrated lambs are favorable receptacles for their entrance and development. A close-meshed wire net, with plenty of stakes to keep it in position, should be put up in a convenient corner of the field. Where there is a gateway to run the sheep through into the net it is an advantage, as they are much more easily enclosed. As soon as the gate is opened they rush through and are caught by the surrounding net before they realize the trap that has been laid for them. In this way the lambs are not run and heated, a matter which should always be carefully guarded against, and in addition much time is economized by the strategem.

The only instruments required for castration are a couple of knives and a pair of pliers. They should be scrupulously clean, and well smeared by an antiseptic before using, and even occasionally during use. The blades of the knives should be long, broad, and sharp. One should be used for the removal of the tails, and the other for slitting the scrotums. The pliers, which have recently been invented by an interesting firm, are lined with india-rubber on one jaw, so as to lessen the risk of bursting the testicles when pressed between them.

A strong man should be procured to hold the lambs, with two active lads to catch them in addition. The former should place the back of the lamb against his chest, with the fore and hind legs doubled firmly in the grasp of either hand. The holder should lean his back against a net stake, which gives him more power over the lamb; and the pressure of the rump of the latter against the chest of the former has the effect of causing the testicles to project favorably. For convenience the operator may pierce a hole in the ground at his right hand, and turn the mallet upside down with the handle in the hole, the square head of which serves as a handy table on which to lay the knives and pliers alternately as required. As soon as the lamb is in position the operator seizes the scrotum between the thumb and fore-fingers of both hands to feel if the testicles are in a natural position. If satisfied on this point, the lower portion of the scrotum should be held between the thumb and fore finger of the left hand, and the end removed from right to left by one draw of the knife. Generally the points of the testicles will protrude, and the edges of the scrotum should be pushed back by the left hand, while the testicles, one at a time, should be steadily and carefully drawn away with the pliers by the right. Care should be taken to avoid catching wool in the pliers, or the difficulty of extracting the testicles will be increased. It is very important that they should be drawn cleanly out, as broken portions frequently fester and retard healing. As soon as this is accomplished the lamb should be turned down to the ground upon its feet, and the tail severed at the required length, which is generally about 4 inches, or an ordinary handsbreadth, from the body. Drawing the testicles by the teeth is an unpleasant and antiquated custom, which will soon be numbered among the things that were. Slitting the scrotum on either side of the central division is an old and dangerous method of castration, as the blood congeals and lodges at the bottom of the scrotum, causing great pain and not infrequently death.

The antiquated system of searing with hot irons is still practised in certain districts, as well as dressing the lacerated parts with oil, etc., but, in the opinion of the writer, the less handling lambs get the better when castrated. Gentle exercise is a good preventive to ill effects following castration. The shepherd should keep moving among the lambs during the afternoon of the day on which they are castrated to prevent them lying too long, which stiffens them. By removing the end from the scrotum, very few cases of lodgment of blood occur, as it escapes easily through the open end. When it does occur, however, great stiffness in the hind-legs of the lamb is observed generally within forty-eight hours after the operation. The scrotum should be reopened, and the congealed blood pressed out, and the parts well rubbed with oil, otherwise death from inflammation may very speedily follow. It is better to bury the tails, etc., of the lambs, as when left lying about they

putrify and attract dogs, and much evil may result from such carelessness.

Sheep, Good and Bad

From Address by Prof. J. A. Craig before the Minn. Agricultural Society

To form a basis for estimating the good and bad qualities of sheep, it is best to first consider the carcass and that from the butcher's point of view. The different parts of the lamb from the butcher's standpoint show a wide variation. The neck has a value of one cent per pound, the shoulder two cents and the shanks the same. The rib running from the point of the shoulder to the loin has a value of nine cents per pound, and the same is true of the loin, while the leg of mutton, or the "giggots" as they are sometimes called, have the highest value per pound of any part, as they are quoted at ten cents. The breast, however, has the low value of two cents in Chicago markets. From these facts it will be seen that the back and the development of the leg are the most important points to criticize in the form of the fat lamb. In what has preceded, attention has been given particularly to the perfections but there are many defects worthy of being mentioned that are characteristic of fat lambs. Very often the top of the shoulder is not covered sufficiently with flesh, letting the top of the blade come out too sharp and bare. This part, for at least the length of the hand, should be flat and well covered with flesh in the fatted sheep. The ribs should spring out from the body and all should be well covered with firm flesh. The backbone should not stand prominent at any point, as it is sometimes at various points along the back. Frequently it is grooved on account of the development of flesh along it, but it is better to be perfectly flat and smooth. The loin in some lambs rises and this is specially a bad defect when it is also bare of flesh. The hind quarters frequently shrink away toward the tail head and down the high. This should not be, as the hind quarter should continue straight and full. From the hip to the hock the fat sheep should be especially strong. Not only should the leg be full and plump with the muscle on the outside, but between the legs in the twist the flesh should run well toward the hock and compel the hind legs to stand wide apart. Badly set hocks often interfere with the development of the hind quarter, and they also are as bad an eye-sore as broken pasterns.

After the form of the sheep has been gone over the quality should be noted. The cleanliness of the bone, the strength of it, and the nature of the hair which covers the face and legs should be noted. These are important features in either breeding sheep or fat sheep. It is, perhaps, most valuable from the butcher's standpoint, because the waste is less from a sheep of good quality than it is from one that is inferior, but sheep of the best quality will not dress much over fifty per cent. of their live weight. In examining the fleece the chief points to consider are the quality, quantity and condition. The best way of arriving at an estimate of the nature of a fleece is to open it first just over the shoulder. It is in this region that the finest and best wool of the fleece is found. By using the hands in a flat position, instead of sticking the fingers into the wool, the fleece may be parted in a nice way. After looking at the wool and skin in the region the thigh should be chosen for the next examination. This part usually grows the poorest and coarsest wool of the whole fleece. Then the covering of fleece on the belly is also noticed. By examining the fleece in these three parts a fair estimate of the quality may be made. In judging of the good and bad qualities in purebred sheep in the breeding classes, the subject of breed type should receive careful consideration. While it has a bearing on the judging of all classes of purebred stock, yet it is of double importance in the purebred classes of sheep. The type of the breed having been decided upon by all the breeders, it should be the aim of the breeder and the judge to recognize it; for, aside from an acknowledgment of the wishes of the breeders, it is a