

## Sheep and Wool.

By CHAS. MALLINSON, Principal Flockmaster.

*History of the Merino Sheep.*—Many efforts have been made to trace the early history of the Spanish merino, but with little success. It has been supposed that the earliest sheep were introduced into Spain from Barbary. Certain it is that merinos were most jealously guarded and cared for by the Spaniards, so much so that at one time the exportation of merinos from Spain was forbidden under the penalty of death. In the year 1464 King Edward IV. of England gave a licence to pass over certain Cotswold sheep into Spain. They were used to improve the length of staple in the Spanish merino. Spanish sheep were divided into two classes—the “stationary” and the “migratory”; the former was not as valuable as the latter, its wool being much coarser and longer in the staple than that of the latter, and almost devoid of crimp. The migratory flocks consisted of the true merino type. The custom was for the migratory sheep to be driven to the mountains for the hottest season of the year, and to return to the lowlands for the winter. By the laws of the Mesta a path, ninety yards wide, was left open for them to travel through the cultivated country. On their way up or down the shepherds might not take one branch of a tree for firing. Sheep folds were constructed for the night of native grasses. In heavy rain the animals were driven to sheltered situations. Jacobs, in 1809, writes: “The shepherds do not permit the merino to leave the folds till the sun has exhaled the dews of night, nor do they allow them to drink from a brook or

pond after it has hailed." That the danger, from an agricultural point of view, of permitting these extensive treks was fully recognized is indicated by the Statute of Ferdinand of Portugal: "That no person who was not a husbandman, or his servant, should keep sheep, either for himself or for others; and if any other person were desirous of having them they must oblige themselves to cultivate a certain portion of land, under the penalty of losing their cattle if the regulation was not exactly complied with."

*Spanish Merino described.*—It is considered that the best description of the Spanish merino is given by Youatt: "The legs are long, yet small in the cone; the breast and the back are narrow, and the sides somewhat flat; the fore-shoulders and bosoms are heavy, and too much of their weight is carried on the coarser parts. The horns of the male are comparatively large, curved, and with more or less of a spiral form; the head is large, but the forehead rather low. A few of the females are horned, but, generally speaking, they are without horns. Both male and female have a peculiar coarse and unsightly growth of hair on the forehead and cheeks, which the careful sheepmaster cuts away before the shearing time; the other part of the face has a pleasing and characteristic velvet appearance. Under the throat there is a singular looseness of skin, which gives them a remarkable appearance of throatiness or hollowness in the neck. The pile, when pressed upon, is hard and unyielding." (Youatt, p. 148.)

Like the wonderful sheep of Arabia, mentioned by Herodotus, the original sheep of South Africa were fat-tailed animals, some a dirty grey colour, some black, but chiefly a dull, reddish brown. Their fleeces were of hair rather than wool, though the native Afrikander has a woollen down next to the skin, which is overgrown with hair. Barrow describes the Cape sheep of his time as follows: "They are long-legged, small in the body, and thin in the fore-quarter and across the ribs. They have little internal or external fat, but it is all collected on the rump and on the tail. They are covered with strong, frizzled hair, of which little use is made except for cushions and mattresses." There are still one or two so-called pure-bred Afrikanders in existence, though it is doubtful whether any of them are just what they are represented to be, for, from the date of the landing of the first colonists, attempts have been made to breed a larger frame and a wool fleece in place of the scrawny body and hairy growth peculiar to the indigenous breed. In these attempts to improve the local flocks practically every well-known breed has been used for crossing on them, including merinos, Leicesters, South Downs, Suffolk Downs, Devons, and Romney Marsh. Probably the cross which has been most popular with the local farmers has been the Afrikander-Persian. The resultant progeny is used chiefly for slaughter purposes, for the fleece has little value, whilst even for the butcher the carcass is not so heavy, nor the flavour and quality of the meat so excellent, that the experiment can be regarded as a success.

*Improving the Afrikander.*—Speaking of the earlier attempts to improve the Afrikander, it is said that "when the value of the merino wool began to be acknowledged, a few of the Spanish sheep were sent to the Dutch Colonies at the Cape of Good Hope, but the native sheep seemed, from the nature of its covering, to be so plainly adapted to the

situation in which it was placed, and the prejudice was so strong and so universal, that it would be useless to attempt to preserve the fineness of the merino wool in the torrid clime of South Africa, and perhaps the prevailing notion of the use of the fat obtained from the tail of the Cape sheep, was so various and so identified with the likings and habits of the colonists that few of the Dutch colonists could be induced to give the newcomer even the shadow of a trial. . . . The difficulties which at first opposed the establishment of the merino sheep have now been conquered, and wool of excellent quality from almost every part of the Colony, and particularly from the eastern districts, have been sent to England." To-day the tendency is to leave the Afrikaner sheep alone and to purchase woolled sheep. The general rule throughout the country is that the farmer who devotes his time to Afrikanders and cross-breds is the least progressive sheep man in the country.

*Breeding.*—Youatt observes: "The object of the sheepmaster is to raise and retain that animal which will pay best for the consumption of its food." The first step in breeding is the classing of the flock, for unless this has been done, and done properly, any subsequent time, trouble, or money expended in breeding sheep will be thrown away. Let it be supposed, for the sake of illustration, that a stud breeder has 500 stud ewes. Say we class them into four lots—fine, medium, and robust wools, and what we would term a dense-woolled family carrying medium quality wool. Now, in classing these 500 ewes, reject those which do not come up to a certain high standard which you have fixed in your mind's eye. The rejected portion would form a sort of second stud. Having classed these 500 ewes, and having got a fair proportion—say, 60 each of the different qualities mentioned—the next step is to procure rams for each portion. That is to say, we must have a fine, medium, and a robust-woolled ram. Also a ram carrying a dense fleece of medium quality wool. All should show wool of good length and style. The ram should be of a bold and masculine appearance, with a good, broad, straight back, and well-sprung ribs. He should stand firmly and squarely on his four feet, and be as near as possible to the ideal sheep. The ewe should be a little finer about the head than the ram, with good conformation.

In managing pedigree stock of any kind it is a generally-accepted principle that line breeding is necessary to stamp typical characteristics: without it you would never get that uniformity of type which is the object of the flockmaster's ambition. Unless you are willing to give time and attention to valuable stock, do not be too anxious to acquire such. Remember any animal must have rational treatment to give profitable results.

*Hints on Mating.*—With regard to mating, first of all we will take the fine-woolled ewes, say 50, and with them we will mate the medium-woolled ram (it is understood that the wools of the three rams—fine, medium, and robust—are of medium density and a good combing length). In order to keep this medium-woolled ram's family going, we take ten or a dozen of the medium-woolled ewes (possessing none of the faults which the ram may happen to have), with the idea or expectation of producing a superior sire to the one of that particular family you are already using. In the event of a better sire not turning up from the ten medium ewes, it will be necessary later on to put all the medium-woolled ewes to the medium-woolled ram.

because it is just possible that ewes outside the dozen—although, so far as one can see, not so well suited to the ram—may produce the young sire you are wanting. Let us now take the remaining 50 of the medium-woolled ewes and put them to the fine-woolled ram, with ten or a dozen of the pick of the fine-woolled ewes to keep that family going. Now give the robust-woolled ram 50 dense and 10 robust-woolled ewes. Next the dense-woolled ram takes 50 robust-woolled and 10 dense-woolled ewes.

The same procedure may be followed in the two latter as in the two former cases in order to get a superior sire. This would also increase the number of pure ewes of each particular class. A sheep that has been bred from within its own particular breed and family line (it is only natural to suppose) would be more prepotent than one that has many breeds in its composition. The reader will notice from the above that extreme mating of the families have been avoided. These families should be carefully pedigreed so that close in-breeding may be avoided. The object of this mating is to get a uniform wool of good, even quality and length in your stud and general flock, and still to maintain the four distinct lines. A good ram bred by yourself is worth two you buy, and in many cases a great deal more. The best of the rams bred in these families could be used in the second stud or the rejected portion of the 500. From these you would also breed very good rams that could be used in the general flock, assuming, of course, that they have been classed.

*Classing Sheep.*—Constitution. Nice frame, and a fleece of a fair combing length and density, showing a good crimp from the skin to tip are indispensable in good sheep breeding, bad points are in regard to the wool on the sheep, weak backs, wool parting right down the middle. It is important that sheep should have sound backs or the fleece will be cut right in two, as it were. Crape wool, or what is known as watery on the belly and point of foreleg and between folds on neck, rough, coarse stuff on the brich. Straight-haired and mushey. Short, fatty, and badly bred wools are all points to be avoided. Sheep with big folds on the body so far as the fleece is concerned are of a most uneven character. The object is to get the covering as even as possible; the more even the wool the higher the price per pound. Big folds or wrinkles do not mean density, it means a larger skin than the sheep is able to fill out. When wool gets too far away from the flesh it gets wild, staring, wiry. In my opinion some judges give too much attention to wrinkles and hair instead of to wool. Sheep should not have a bigger load stacked on than they are able to carry and look for their living unless you are prepared to artificially feed. Overloaded sheep are the first to die when hard times come; if it is desired to breed good sheep you must pay the same strict attention to the breeding ewes as you do to the rams. The merino sheep is a most cosmopolitan animal, and responds most readily to good treatment; it will thrive in most countries fit for sheep to live in. If one is trying to establish certain points in sheep or to breed out certain defects the quickest way to succeed is by culling and careful selection.

*Classing of the General Flock.*—I am afraid that it is the custom with a good many farmers in South Africa to do the culling of their breeding ewes when they are visibly aged or broken mouthed. By that time the inferior ewes have done all the harm they can. Their

descendants are still carrying on and transmitting the bad qualities to the next generation. The farmer who carries on the business of sheep breeding in this way will never succeed in his profession. The correct plan is to class all the young ewes before shearing. Bring them to the yard, catch and examine each in turn. Care should be taken not to cull for frame alone or for wool alone. Adhere to the happy medium, and gradually the eye and hand working in intelligent sympathy will tell, with seldom failing accuracy, by the look of the animal and the grip of its wool, whether the particular sheep has to be more carefully examined for possible rejection. It should be the object of the breeder to have the flock after classing as even as possible—even if he has to cull—say, five per cent. more than in previous years. We cannot here lay down any hard and fast rules as to what proportion of culls should be taken out of a flock. I have classed sheep in Australia for over twenty years, and I do not remember ever taking less than ten per cent. out of any man's flock—I have taken out to thirty per cent., but I should say the average culling there to-day would be from fifteen to twenty-five per cent. If the sheep breeders of South Africa wish to get up to the Australian standard they will have to carry out an equally *thorough system of culling*. I know of no other way by which it is possible to breed good sheep. The question may be asked: "Where do these culls go?" In many instances they are sold to farmers who breed fat lambs for market, but it is only right to say before putting them to the ram (which should be of some English breed) he would take all the small ones out and fatten them for the butcher. It is anything but sound policy to keep poor, low quality sheep when their places might be filled by a better lot. The change may be brought about gradually and need not call for any great expense if the classing is kept up every year. The best and quickest way to succeed in sheep breeding is by close culling and careful selection. There is no such thing as a short cut.

*What a good Ewe is.*—A sheep of sound constitution and good frame ought to carry a fleece of combing length, the wool showing a decided crimp from the skin to the tip. Wool of this character and style should not only form a kind of saddle on the sheep's back, but extend all over the body, belly, and joints. Any sheep not coming up to this standard is more or less faulty. Wool on the sheep's head should not come below the level of the eyes. I think some breeders make a great mistake when they develop the wool right to the nose. It may seem a small point, but in the writer's opinion it is interfering with nature too much. Sheep so blindfolded have not the same chance to look for their living as those with open faces. The face and ears should be soft and silky. The mouth should neither be under nor over shot.

*Preparation of Wool.*—Many sheep farmers seem to have an idea that anything they put in the bale will help to swell the money value of such wool. This is a very great mistake, and does much harm to the industry. Farmers must thoroughly understand that any foreign matter sold with the wool actually reduces the price, because it costs the manufacturer money to get rid of it. If the farmers of South Africa would take into consideration that wool buyers are specially trained men, and are always on the lookout for any faulty packing, here would very soon be a great improvement all round. Seeing

that the export of wool from South Africa has risen from £2,768,086 in 1908 to £4,780,594 in 1912, it is a matter of very great importance to this country that the farmers should learn how to grow the right kind of wool and be able to present it for sale so as to command full market value. Always remember when there is carelessness shown the value of the wool will most certainly fall. The very lowest class of wool has its price, but if left on the fleeces it reduces the price of such fleeces. String, jute, fibre, chaff, straw, and dust, in fact anything which is not wool is not wanted by the manufacturer; the presence of these articles in wool reduces the price very considerably, because he has to get rid of them. It is a strange thing that after spending so much money and talent on the production of wool many farmers' clips are displayed in a most unattractive manner.

Skirting, rolling, classing, and pressing should be done as though the buyers were on the spot. The object of classing wool is to get it up in such a way as to make it attractive in the saleroom, and in distinct lots according to quality and condition, so that the buyers can fix their maximum value in the minimum of time. How many farmers argue that it does not pay to class. They say: "Mr. So-and-So's wool was classed last year, and I put everything in the bale and the result was the same." This way of looking at it is all right as far as it goes, but was the wool the same quality as the other chap's? Was the condition the same? And was there the same amount of vegetable matter in it? These may seem only trifles to the growers, but to the buyer they would make a difference of a penny per pound.