in case a dummy should be practiced on, we will describe dismounting. When about to dismount, the horse should be brought to a stand, the rider again takes both reins in his left hand, catches the pommel, releases his right foot from the stirrup, lifts the leg, and carries it promptly upwards and backwards over the horse's back. As soon as it has passed the saddle he catches the cantle with right hand, and lets himself down promptly but steadily, gradually turning, until, when the right foot touches the ground, he is standing with his left shoulder towards the horse's near shoulder, in the same position as when mounting. He then promptly releases his left foot from the stirrup, and turns inwards until he is facing in the same direction as the horse, when he will take the reins in his right hand and stand to attention. As stated, mounting and dismounting may be profitably practiced on a dummy.

After mounting, the length of the stirrups must be adjusted. Different riders use stirrups of relatively different lengths, but on general principles we may say that a stirrup of medium length is proper. The leg must not be straight, neither must there be too great an angle at the knee, as would be given by a short stirrup. The foot being placed in the stirrup so that the weight comes on a level with the ball of the great toe, it is held with the heel about two inches lower than the toe, and the heel must not be turned too much inwards. It is not possible to ride comfortably with the heels turned outwards, but if they be held lower than the toes, and not turned too much inwards, the spurs, when worn, will not touch the horse unless the rider so desires. The stirrup leathers should be of that length that when the rider stands on his stirrups there will be about two inches between him and the saddle. When the horse is in motion the rider should sit erect. He may hold his reins in one or both hands; usually both are used. The arms, from the The arms, from the shoulder to the elbow, should follow the direction of the body, and the elbows should always be held closely to the side, not allowed to move upwards and outwards and then downwards and inwards with the motion of the horse at any gait, but be kept stationary close to the side at all times. All motion of the arms should be below the elbow. From the elbow to the hand, the arm should nearly follow the form of the body, and both hands be held rather close to the body at about the height of the pommel of the saddle. A good rider does not extend the arm from the shoulder, even though his mount be pulling hard.

At the walk, canter or gallop, the rider sits as firmly as possible in the saddle, and at all gaits he keeps his knees slightly pressed against the flaps, not allowing his legs to deviate outwards and inwards, or forwards and backwards, with the motion of the horse. When trotting, he must rise or "post" with the motion of his mount. This should be done by extending or straightening the knees sufficiently to raise the body slightly from the saddle, at the same time giving a slightly forward action, but this forward action should not be observable above the waist, the body above which should be carried erect. Care should be taken to acquire light hands. Posting, balancing the body, etc., must be done by the body, and not by the aid of tension put upon the reins. A horse's mouth is not supposed to be subjected to such irregular tension of this kind as is often put upon it. By holding the arms and legs properly and exerting the necessary muscles, even tension is exerted upon the mouth. Unless these points are attended to, the rider will "worry the mouth," and the horse will become cranky or a puller, either of which makes him very uncomfortable to ride. When the rider has had sufficient saddle exercise to ensure good hands and a good seat, he may ride with a curb and wear spurs; but it requires good hands to ride with a curb and keep your mount in good temper, and it requires a good seat to enable a man to ride with spurs and not prick your horse unintentionally.

There are several ways of holding the reins. Probably the most common method when using but one hand (which is always the left), is to hold the hand with the back upwards, the right snaffle rein between the thumb and forefinger, the left between the third and little finger, the right curb rein between the fore and second finger, and the left between the second and third, with the ends of the reins hanging from the little finger side. When both hands are used, they are held with the backs upwards, the snaffle rein held between the little and third finger, and the curb between the third and fourth. When a whip or crop is carried, it should be held in the right hand, two or three inches from the butt, extending at right angles to the left over the saddle, with the point slightly elevated. With a good saddle horse, the curb is worn more for form than for use, and the tension exerted upon it should be very slight, but the rider should have such control of the curb reins that he can exert tension upon it when necessary.

"WHIP."

STOCK

Milk Flow and Fecundity.

An English breeder of sheep conceived the idea some years ago that if he could increase the milk producing propensities of his flock an increased fecundity would follow. He accordingly set about his task and has developed a flock with four active teats to the udder instead of two. His experience, however, does not bear out his first hypothesis, for his flock is no more prolific now than when they gave less milk, nor, we surmise, are they likely to be. We have nevern oticed, nor have we heard it observed, that dairy cattle more generally give birth to twins than do those of the beef breeds although they probably are more regular breeders. Milk production being a maternal function it naturally follows that other associated functions would be stimulate in a tribe of animals that showed an increase in milk flow, but to increase the numbers of young at a single birth would be a too violent disarrangement of nature's plan. The Englishman's experiment is interesting as showing to what an extent functions may be modified by breeding, but as for adding material value to the ovine tribe it is of no significance.

Utility the Basis For All Ideals.

When Robert Bakewell started his work of improvement upon the Leicester sheep he had no beaten path to follow, and no ideals except what he himself created. His aims were to produce an animal which would give better returns for food consumed, and which, when fattened, would meet the requirements of the market, giving less offal, and a larger proportion of valuable meat than the animals with which he started out. The same objects were kept in view in his work with Longhorn cattle, and to increase usefulness was his main object when striving to improve the English cart-horse. We have stated that Bakewell had no beaten path to follow, but there are cases where breeders have deliberately left the beaten path, climbed the walls of prejudice erected on either side to keep the faithful from straying, and blazed new trails which eventually became popular highways, overshadowing in importance the original paths. Such a man was Amos Cruickshank, and the stories of his trials and difficulties, and of his ultimate triumph, are too well known to require repetition here. We might go on citing incidents of successful breeders almost indefinitely, but perhaps enough has been said to illustrate what might be called the origin of ideals. Where did Bakewell get his ideals? Was it not from the fact that farm animals of his day did not meet the requirements of the farmer and the consumer? Whence came Cruickshank's inspiration? We are told it was from the demand of the tenant farmer. The Shorthorns of that day did not meet the requirements of the tenant-farmer, and Cruickshank, with no thought of achieving fame, undertook to produce something that would supply the want. Here, then, are two men who achieved undying fame through increasing the usefulness of the animals they produced. In other words, utility is the foundation of all successful work in stock breeding. Fads and fancies may have their day, but they eventually disappear, and their originators are forgotten. It is only the work which has utility for its foundation that can endure.

It is not unprofitable for present-day breeders to turn back the leaves of the past and study the results of following true and false ideals. The great markets of the world practically fix our ideals. If our ideal is out of harmony with market demands, we may rest assured that we must either change our ideal or be numbered among those who have essayed the impossible and failed. Perhaps one of the greatest stumbling blocks in the way of the average breeder is the question of fashion. A fashionable pedigree will cover a multitude of faults in the eyes of many breeders. Do we ever stop to consider what made certain strains or families of live stock popular, or fashionable, and why animals derived from these strains are accounted fashionably bred? Was it the pedigree that brought these families into prominence? Most certainly not. It was the remarkable excellence of the animals from a utility standpoint which attracted attention to the families to which they belonged and caused their pedigree to become popular or fashionable. Take Shorthorn cattle, for example. Scotch Shorthorns are popular at the present day, especially those which trace back to the herd of Amos Cruickshank. Whence came their popularity? Was it not from their excellence as utility animals? But, unfortunately, Scotch cattle are not all good. Even among the most fashionably-bred sorts we find inferior specimens, and if the excellence of the animals have disappeared, of what value is the pedigree? A Scotch pedigree is good, but it must be accompanied by an animal possessing Scotch merit. The same principle applies to all classes of stock, and there is always a danger that the inexperienced breeder may mistake the shadow for the substance. The pedigree is the shadow. It indicates possibilities, and gives us indispensable information regrading the ancestry of the animal; but the animal is the substance, and if it is a weakling, no pedigree can make it good. No reflection is intended upon pedigree as a means to assist the breeder, but pedigree was never intended to serve as an ideal.

Modern ideals, then, must have the same basis as those of the older breeders. The demand of the market, or, in other words, utility, must be the foundation of correct ideals. When markets change, ideals must change with them. This point has been well illustrated in our own country of late years in the case of the bacon hog. If we are to succeed as breeders of flesh-producing animals, the feeder, the butcher and the consumer must ever be kept in view, and our ideals shaped accordingly. In this connection the show-ring plays an important part. The show-ring cannot originate ideals, but, if competent judges are employed, it places before the general public types which meet the demands of the day. The judge should know what the market demands, and his decision should make this point clear to the onlookers. Too often we are led to regard the show-ring as merely a battle-field where breeders strive for supremacy. But it should be more than this; it should be a school where the everyday farmer and feeder of live stock can come to learn what kind of animal is most in demand. The show-ring should be educational, and should spread abroad information regarding what ideals are safest to follow.

In concluding these rambling observations, let me urge upon every young breeder to make sure that his foundation is sound, and to assure him that there can be no safe ground except that of utility. Let his watchword be, utility first, utility last, utility always.

G. E. DAY.

Ontario Agricultural College, Guelph.

Parasites that Infest Sheep.

Our domestic sheep may be infected by many kinds of small animals living in or on their bodies as parasites—that is to say, obtaining food from the blood or other juices of the sheep, and thus living at their expense. An animal which harbors parasites is called by naturalists the "host," because it provides them with food and shelter. We cannot believe that such provision is made willingly by the host, which not only receives no benefit in return, but is often seriously injured through the drain on its system, and sometimes killed by the parasites. The multiplication and crowding together of animals that have been domesticated has led to a great increase in the numbers of their parasites. A knowledge of the life-history and form of these parasites is, therefore, of importance to the flockmaster who wishes to protect the beasts under his care from disease.

Many well-known worms, such as the liver-fluke and various thread-worms, are dangerous parasites of sheep. In the present article, however, attention is drawn only to those sheep parasites that belong to the great primary division of the animal kingdom, whose members are distinguished by a firm outer skin and jointed legs. Two classes of these animals are represented on sheep. The "spider-animals" (Arachnida) have eight legs, and their head is not distinct from the