altogether of great substance. At the show of the Ayrshire Association held in 1852, there were no fewer than 28 bulls shown in the class over three years old, and in 1854 the winner was "Major," one of the greatest bulls of the breed. He was bred and owned by Mr. Parker, was brindled in color, like his dam, and was thought to be rather feminine-like in character. His advent may be said to mark the beginning of a new era in the history of the breed. He was first at Glasgow, Ayr and Bart Kilbride in 1852-3, but sustained defeat in the following year at Glasgow. Major was possibly the first of the great Ayrshires which attracted universal attention to Mr. Parker's herd. The owner devoted his whole attention to his Ayrshire stirks. He was a typical farmer of the old school, and, no matter how employed, invariably wore a tall hat. Mr. Parker deserves to be remembered as one of the great stock-breeders of Great Britain. He left the impress of his genius on the Ayrshire breed, and had those who followed him been content to adhere to his ideals there would have been less complaint than was for long so common about the lack of commercial value and merit in the Ayrshire breed. Major was undoubtedly a famous sire. His first great son was Cardigan, a bull bred by Mr. Parker, and owned during his public career by Mr. Ivie Campbell. His epoch is clearly indicated by his name, borne in honor of the leader of the forlorn charge at Balaklava. Cardigan was first at Ayr as a stirk, a two-year-old, a three-year-old, and a four-year-old, and only once suffered defeat, being placed second at Glasgow when a stirk. In color he was very dark brown or nearly black; like his sire, he had long horns, which were scarcely wide enough, but his neck, shoulders and back were faultless. His female produce were not famous in the show-ring, being rather deficient in the formation of the milk vessel; in fact, it was said that he only left one good cow, which can be interpreted from the show-yard standpoint and easily understood. His produce were characterized by great bodies and plenty of style, and although faulty in their vessels, had good teats, and were of the type that would now be popular in an auction ring and be in demand with Canadian breeders who want cows that will fill the pail. No photograph of this bull exists; the only one that ever did exist was destroyed by fire. The merit of Cardigan is reflected in the enthusiasm with which men nearing the fourscore sound his praises. One hundred pounds was offered for him by Sir James Fergusson, Rart., who wanted to show him at the first Paris exhibition. The price was refused by his owner, Mr. Ivie Campbell, who was a born sportsman and lover of high-class stock of every kind. Another bull of the same race was named Clarendon. He had the same breeder, owner and sire as Cardigan, and their dams were a pair of brindled cows. Clarendon's dam was the better cow of the two, and although Clarendon was not individually as good a bull as Cardigan, he is regarded with greater favor as a sire. His female progeny had the vessels and teats which were favored by "the fancy" at the time, and were show winners. A full sister of Clarendon, of the same color, was one of the greatest show cows of the breed. She had the vessel and teats of a right dairy cow, was of the same color as the rest of the progeny of Major, and her description shows that she was not one of the kind which

This scant survey of the Ayrshire leaders up to about the middle of the nineteenth century proves that whether improved or not, there is a great difference between the show animal of our time and the show animal of that day. The show bulls of to-day are not so masculine as those of half a century ago, but they had far more to do with developing the type of the breed than our present show animal. The modern show-yard Ayrshire, in fact, is very much a breed by itself, and exerts little influence on the purely dairy stock of the country. That points to a defect in our system of show-yard management, but it also suggests that for a time at least buyers in quest of commercial dairy cattle should not attach over-much importance to the show-yard type. These older bulls left their influence on the breed. They were in much request, and the type is still to be found in the great breeding districts by those who look for it. The breed has not been improved much in commercial qualifications if the show-yard is to be the only test, but if the experience of the great army of Scottish farmers who live by milk-selling and the manufacture of milk products is to be the test, then the Ayrshire of to-day is a worthy heir of the great animals which have been briefly described.

brought the show Ayrshire into disfavor.

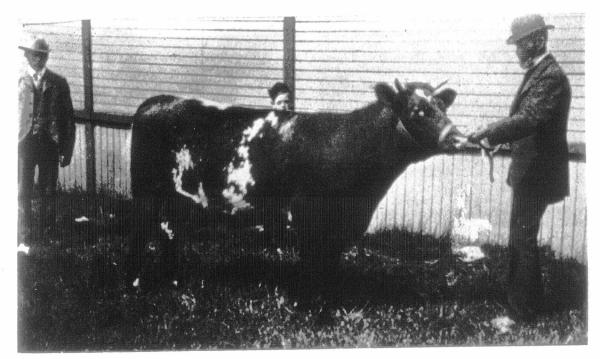
Sheep Breeding and Management.

A Nova Scotia subscriber asks for information on the breeding, feeding and winter management of sheep. To cover all this ground exhaustively would require a volume, but a few of the principal requirements may be briefly stated. If the intention is to start a pure-bred flock, we would advise the purchase of a few yearling or two-yearold ewes from a flock of known excellence, and a ram of the same breed, of strong character and constitution, with good bone and wool; mating these at the proper season to bring the lambs in the month required. If the intention is to handle grade sheep for the mutton and wool markets, start with a selection of thrifty young common or grade ewes, and mate them with a good strong pure-bred ram of the breed preferred, and continue to use a ram of the same breed, culling out each year the oldest and inferior ewes, and keeping the best of the ewe lambs to replenish the flock. But do not breed the ewe lambs the first year. They should not be bred till about 18 months old, and should produce their first lambs at about two years old, which gives them time to grow strong and lay the foundation of a good constitution. If it is desired to have early winter lambs to sell to the butcher at six to eight weeks old, the ewes will need to be in fresh, thriving condition in August or by the first of September, in order to bring them in season to breed in that month; and for this purpose nothing is better than a field of rape, which, if sown early in June, should be ready for feeding off by Sep-

If early spring lambs are preferred, the ewes

sheep dips twice a year, viz., after shearing in spring, and again before going into winter quarters. For our own part, we would not think of commencing the winter with a flock of sheep without treating for ticks, whether any were visible or not. They are almost sure to develop before spring, and it is hardly practicable to safely treat a flock of ewes when forward with lamb. The expense will be repaid doubly or more by the healthy condition of the flock and the increased growth of wool. There is almost no risk in either dipping or pouring in the early winter, but we prefer pouring where the number is not great. Three men, or one man and two boys, can treat by pouring 60 to 75 sheep in a day. One man catches the sheep and turns it over, setting it upon its rump; he and his assistant open the wool at intervals of three or four inches, around the neck, belly, sides and thighs, while the third, from a coffeepot, pours in the solution. The sheep is then let stand on its feet, the wool is parted the full length of the back and neck, and a good stream poured in, and the operation is completed. The solution should be kept warm, and frequently stirred, and the sheep kept from cold drafts till dry.

A sheep house need not be expensive. A plain, simple, wooden shed, without a loft, will answer the purpose, unless it is desired to store hav above for convenience in feeding. Where no loft is provided, the sheep house should join the barn or be close to it, so that fodder need not be carried far. The building should be on dry ground, with a slope away from it to carry off water. If such a site is not convenient, a little work with plow and scraper will put the ground in desirable shape. Provision should be made for a good-sized yard in connection, as sheep love the open air and a high and dry lair. The sheep house should face the south, should be enclosed on all



YEARLING SHORTHORN HEIFER, DIAMOND QUEEN.
PROPERTY OF JOHN MORGAN & SONS, KERRWOOD, ONT.

should be bred early in October. to bring lambs along about the first of March, and as a rule breeders of pure-bred sheep prefer to have their lambs come in this month, finding that, generally speaking, the early lambs come strong, and if the ewes are well fed after lambing, the lambs go on well and are of good size in the coming fall to sell, the ram lambs for breeding purposes, and both ram and ewe lambs for show purposes if need be. With early lambs it is more expensive to winter the ewes, as they require a better class of feed in order to make milk for the lambs and keep up their own strength and condition, and to this end should have a moderate supply of roots for at least a month before lambing, and in addition, after lambing, a light, feed of grain, preferably oats and bran, twice a day, together with a liberal supply of good hayclover, of course, preferred, if it be available. The lambs when three weeks old should be provided with a low rack and trough in a separate enclosure, with a "creep" or opening through which they can go and the ewes cannot. There the little ones should have a regular supply of good-quality fodder and ground oats and bran, and sliced roots, in order to do their best and to relieve the drain on their dams. The ewe flock may be wintered most cheaply by having the lambs come along in April or May, as up to that time they may be carried through on pea straw and clover or other hay alone, though they will be better for a feed of roots every day, or, lacking these, a light feed of oats. Lambing at this season, they will require less care and labor than if the lambs come earlier.

An important matter to be attended to at the beginning of winter is to see that the flock is free from ticks or lice. The best flockmasters make it a rule to dip or pour with one of the standard

and have wide double doors, which should be left open, as a rule, day and night, and closed only in stormy weather or at lambing time. If dogs are feared, better have high woven-wire fencing around the yards, a wise provision in any case. The ewes and the lambs coming a year old should be kept separate, and if ram lambs are wintered, they should, of course, be kept separate from the ewes and from the ewe lambs. The division for the ewe flock will require to be the largest, and it is well to have it large enough to admit of dividing it by means of movable hurdles at lambing time, in order that, the ewes which have lambed may be kept separate from those which have not, and may be fed more liberally. Feed racks may divide the pens and the sheep feed from either side, but we prefer single stationary racks around sides of pen, with permanent troughs attached to catch leaves of hay, and in which to feed grain and roots. The lambs the first winter should have sliced roots and a light feed of grain daily. The ewes will scoop the roots if given to them whole, and will be better for the exercise. Water is not a necessity where free access to snow is given, but sheep will do better if water is regularly supplied. Salt should be constantly kept in a box in the pen. where the sheep may take it at their pleasure. A few light hurdles, 6 feet long by 2½ feet high, are very useful at lambing time for making temporary pens for confining for a few days ewes having weak or twin lambs, until they become acquainted. Docking and castration of lambs should be attended to when the lambs are two or three weeks old.

Robt. C. Brandon, Cannington, Ont.:—"Your very practical paper now appears one of our necessities on the farm."