

The Breeder and Grazier.

The Calving of Cows.

The early portion of Spring is the most advantageous time for the calving of cows, and our stock farmers will now have to be on the alert in reference to this very important department of their art. A few practical hints may, therefore, not be without their interest and reasonable application.

The gestation of the cow comprises about forty or forty-one weeks, seldom varying more than a few days, and as the expiration of this period approaches, the appearance and state of the animals should be frequently and carefully observed. A cow about calving should be separated from the herd, and have a warm, quiet place assigned her, with dry, comfortable bedding, and a moderate supply of suitable food. A distention of the udder, the falling of the flank, and other well-known symptoms of approaching labor, should be carefully observed, and preparations made accordingly. In our changeable climate, early spring is always more or less attended with cold, sharp winds, and serious mischief sometimes arises, both with cows and calves, from their being exposed at so critical a time to their chilling and debilitating influences.

When the operation of calving actually begins, then signs of uneasiness and pain appear, a little elevation of the tail is the first mark; the animal shifts about from place to place, frequently getting up and lying down, as if not knowing what to do with herself. She usually continues some time, till the natural throes or pains come on; and as these succeed each other in regular progress, the neck of the womb, or *os uteri*, gives way to the action of its bottom, and of its other parts. By this action the contents of the womb are pushed forward at every throes, the water bladder begins to show itself beyond the shape, and to extend till it becomes the size of a large bladder, containing several gallons; it then bursts, and its contents are discharged, consisting of the liquor amnii, in which, during gestation, the calf floats, and which now serves to lubricate the parts, and render the passage of the calf easier. After the discharge of the water, the body of the womb contracts rapidly upon the calf; in a few succeeding throes or pains, the head and feet of it, the presenting parts, are protruded externally beyond the shape. The body next descends, and in a few pains more the delivery of the calf is complete.

In natural presentations, that is, when the two forefeet and the nose of the calf can be distinctly felt by gently inserting the hand into the uterus, but little extra assistance is required. Nature, if left to herself, will, under such conditions, generally expel the fetus. The treatment, therefore, is very simple, and the natural throes or pains should be allowed to go on without any interruption, and the result, in most instances, will be as rapid and satisfactory as is desirable. But where the water bladder breaks early in calving and before the mouth of the womb is sufficiently expanded, the process is often slow, and it is a considerable time before any part of the calf makes its appearance. In that situation it will be necessary to give some assistance, which consists in introducing the arm into the womb, and laying hold of the fore legs till they are brought into the passage gradually assisting at every pain or throes; this being accomplished, the rest of the business is brought early to a conclusion. As soon as the calf is brought forth, its nostrils should immediately be cleansed from the adhering mucus, the mouth opened, and when it has breathed freely, it may be carefully rubbed with a wisp, and then presented to its mother, who will at once lick it freely with her tongue, which acts both as brush and curry-comb most advantageously. In a few minutes it should be lifted up, be supported, and enticed to suck. If it sucks freely very little danger is to be apprehended, and the dam and calf may be safely left together. Warm water only should be given to the cow, and her food should be of a mild and nutritious character, avoiding cold roots or the like. The calf should be left with the dam at least three days, in order that it may draw its food at first naturally, and as it is required. By this time the first milk, or "bestlings,"

acting as a gentle purge, will have passed through its bowels, cleansing them of all mucus; it may then be safely removed and brought up by hand.

In cases of wrong presentations, the cow should be carefully examined, by inserting the bare arm as far as possible into the uterus. Upon ascertaining the position of the calf, such judicious means must be adopted to get it away in the best manner, the judgment, formed by experience, may dictate. In a presentation where the hinder parts come first, the calf may occasionally be drawn away; but, generally, in such presentations, the legs are doubled backwards; it is then necessary to push the calf back into the womb or calf-bed, and, if possible, turn it, or get forward the legs, for it cannot come forth doubled up as it is; in either case it is a most difficult task to get it away safely, and often results in the death of both dam and calf. In extremely violent cases the womb, or calf-bed, will frequently protrude and fall down. This is a very difficult thing to restore, with safety, to its proper place, owing to the continued pain of the cow. It should be well washed in warm water as quickly as possible, before it has much time to swell, and, with double fists, it should be firmly pushed into the uterus, where it must be secured by strong ligatures sewed across the opening. The cow should have a strong dose of laudanum to quiet her for some hours, so that the calf bed may have time for the swelling to subside. Subsequently give her a little warm water, with some meal stirred in. This should be given repeatedly, but sparingly, so as not to load the stomach. No heating or any purgative drenches should be given, and everything done to keep the animal perfectly quiet. The cleansing or after-birth, usually comes away in a few hours, and generally requires but little attention. If, however, it should become necessary to draw it away after the lapse of several days, the operation requires to be performed with much judgment and care.

When the cow has had a protracted and difficult calving time, she will require careful treatment. In common natural cases she will be soon all right; but in difficult cases, brushing of the belly and loins with a crisp is said to be serviceable, and gentle walking exercise for a short time in the open air, when the weather is warm and fine. Gruel and cordial drinks may also be occasionally given. The latter may consist of a quart of ale mixed with sugar or treacle, and diluted with water, and given warm. The old "cow-leech's" drench is—1 oz. aniseed, powdered, 1 oz. sulphur, ditto, 1 oz. liquorice, ditto, 1 oz. diaphoretic, ditto, 1 oz. long pepper, given in a quart of warm ale.

The old barbarous practice of driving a cow about while, or just before calving, is now, happily, exploded, except in very benighted situations. It was ignorantly believed that such extreme exercise facilitated the operation of calving, whereas its tendency was the exact contrary, and many a valuable animal has been lost by such unreasonable and inhuman treatment. A cow in open pasture will usually leave the herd, and seek some sequestered place for calving, an instinct which clearly points out the necessity of quietness in our treatment of her at this critical period.

Milk fever, or dropping, after calving, is one of the most dangerous diseases attending parturition and unless timely arrested, will very soon prove fatal. Cows in high condition are very liable to this complaint, especially if they are kept close, and luxuriantly fed, previous to calving. The symptoms usually show themselves within two or three days after calving, sometimes within a few hours. They are known by the cow shifting about from place to place, frequently lifting up her legs, with a wild appearance in her eye, and unless the disease is arrested she will, after a while, stagger and fall down. The usual recourse is to take three or four quarts of blood from the animal, and promote the natural evacuations by Epsom salts, nitre, &c. This and other diseases, however, cannot be successfully treated, except by the merest accident by inexperienced parties, and therefore we would strongly advise our readers to employ duly qualified veterinary surgeons in all cases of serious disease whether in the cow or horse. Unfortunately, such aid is not at present available in most parts of this country; and, as our stock is rapidly increasing, in both number and quality, and, consequently, in money value, it is much to be hoped that the efforts now making by our Board of Agriculture, in imparting Veterinary instruction, will supply, by degrees, this wide-felt desideratum.

Do Animals Reason?

Do animals reason? I have no doubt that they do. That they have memory is certain. They can be instructed up to a certain point. What is called the "cunning of the fox" is nothing but his quick sagacity. A multitude of stories—even enough to make quite a volume—could be gathered illustrating the sagacity of

the elephant, the horse, the dog, and other animals. Even the stupid "ass knoweth his master's crib." A fox has been known—so I have been told—to carry off a small pig. In course of his way to the woods he had to cross a deep creek, setting up from the sea. He could jump over it himself. But could he jump over it with the pig in his mouth? That was the problem to be solved. He went off a little way and came back with a knot, a piece of broken limb, in his mouth. It was just about as heavy as his pig. "Now," says he, "if I can jump across this creek with this knot in my mouth, I also can with the pig." In a moment he gave the leap and over he went. He then laid down his knot, jumped back again, seized his pig, and stood a moment as if weighing and comparing the two. He hesitated but a moment, when presto! he was over, pig and all. Was this not reasoning and logic? Could a philosopher or a divine have drawn a more acute inference?

A dog had been accused of killing sheep. He and his master were very fond of each other. It was a long time ere the owner could be made to believe the ill report about his favourite. At last he was convinced that poor Rover was guilty. As he could not bear to kill him himself, he came into the room one morning and said, "Peter, you may take the dog after breakfast and shoot him. Mind and kill him dead." The dog was in the room and heard it. In an instant he darted out of the room, and was off in a straight line. No calling or shouting could cause him to turn his head. Straight as an arrow he shot across the loam and went out of sight. Every hour they expected him back. At night he would certainly come. But no, he never returned! Many months after this, his master was riding in a wild, lonely place. Just as he came between the two banks through which the road had been cut, he saw poor Rover standing on one of the banks. His heart yearned towards his old friend, and he spoke to him very kindly. But Rover's heart was hardened. He gave one growl, snapped his teeth at his old master, and again scampered off at the top of his speed. His master never saw him again! Unforgiving Rover! Thy memory was good, thy will was strong, and thine anger lasting!

One more example. A neighbour of mine had a very knowing cat. Of course Tab was a great favourite with all the family. At a time when Tab had a family of kittens, beautiful kittens too, and when it seemed as if it was too much for her to take care of them, one of them was given away to a neighbour. Little kit was carried off in a basket, and warmly welcomed. In a day or two, the door being opened, in walked Mrs. Tab, who seized her kitten and made off with it—seeming delighted to find her child. In about three weeks she came back again, tugging her kitten, and laying it down at the feet of the mistress of the house, seemed to say: "Madame, this kit was too young when you took it before, it needed my care. But now it has grown up and can get along very well. You may now have it." With that Mrs. Tab walked off, leaving her kitten and never returning for it.—*Rev. Dr. Todd.*

The Diminutive Cattle of Brittany.

LITTLE cows of this breed are becoming quite fashionable in England, and some have been imported here. Some inquiries addressed to the *American Agriculturist* are answered by an extract from Mr. Lhat's report of the International Exhibition of 1861: "The little Bretagne cows pleased me exceedingly. Standing only about three feet high on their legs—the most fashionable height—most black and white; now and then, but rarely, a red and white; they are as docile as kittens, and look pretty enough to become the kitchen pet of the hard pressed mountain or hill side farmer, with the pastures too short for a grosser animal. Ten pounds of hay will suffice for their limited wants for twenty-four hours, and they would evidently fill a seven quart pail as quick and long as any other cow. These pretty cows will often hold out in milk, so the herdman said, from fifteen to eighteen months after calving, and often begin with the first calf with six or seven quarts a day. The horn is fine, not unlike the Jerseys, but smaller and tapering off gradually, and the escutcheon or milk marks of Guenon generally very good. Good cows are held from 60 to 70 dollars a head, a fancy price of course, but I am not sure that they would not pay six per cent. on the investment as well as fancy stocks." It would be an expensive matter to import many at the present rates of exchange, when good cows can be bought for \$50 to \$80, and are worth as much as they cost for beef.