

ady, and are confident that with judicious management it can be prevented, which is a great deal more satisfactory than treatment.

As a matter of course, every stock owner and every attendant upon dairy stock has a natural desire to keep the animals under his care in good condition, not only for the sake of appearances, but with the view of increasing the secretion of milk. Now, it is the amount of food that is given to cows before parturition and immediately afterwards that produces the disease; it is wholly the result of the full or plethoric state of the system, and this state can be counteracted by very simple and safe means. For eight or ten days before calving the animal should only be allowed a limited quantity of food, and after parturition the food should also be restricted for some time; it can be gradually increased after four or five days, and when the secretion of milk is taking place in a regular manner. No doubt the cow, for a short period, would not yield such a quantity of milk as if she was highly fed, but the temporary loss would be amply counterbalanced by escaping the dangers of parturient apoplexy. When an animal is in excessive condition, a few doses of laxative medicine may be given, but in the majority of cases restriction of the diet will have the desired effect.

#### MAMMITIS.

The udder, or mammary gland, of cows is very liable to disease. It often becomes inflamed, and the condition is known as mammitis, garget, felon, &c. This affection proves very troublesome, from interfering with the function of the udder, either temporarily or permanently. It may attack the whole organ, or be confined to one quarter. It occurs in two forms; in the one the inflammatory process is situated in the mucous membrane and skin covering the gland, which feels hot and tender, and also reddened and swollen. There is fever, as is indicated by the dry muzzle, hot mouth, and quickened pulse. The animal may suffer pain and distress in progression, and one of the earliest symptoms is lameness in one of the hind legs. The milk is curdled, and mixed with streaks of blood, showing that an acid secretion has been formed. Not unfrequently an abscess forms in the gland, followed by profuse suppuration, completely destroying the structures of the part.

Mammitis may be caused by improper milking, as irregularity in the time of milking, or from sudden changes of temperature. In the months of August and September it is common, and produced by the heavy dews during the night, and the hot weather in daytime, and it often results from exposure to wet or cold, and from mechanical injuries, as blows, or injuries from other cows.

If attended to in the early stage, and proper remedies applied, the symptoms are easily allayed. When occurring during the hot season, the udder should be fomented

with warm water three or four times a day, and well dried and hand rubbed, and a good dose of purgative medicine given, as half a pound to a pound of Epsom salts. The heat and moisture, to be of benefit, must be continued, and an easy and effectual method is to apply a cloth over the udder, leaving holes for the teats, and secure it by means of a bandage around the body. The udder can then be covered with wool or tow, which should be kept moist by renewed application every hour. The teats should be drawn regularly every four hours, and when milking is attended with great pain, the syphon should be used. It is a very simple instrument, and every owner of cows should have them on hand.

The cow should be kept in a comfortable place, and the diet should consist of bran mashes, or of a small quantity of green food.

In cold weather, unless the animal is kept in a very warm place, hot fomentations are seldom attended with any benefit; therefore, instead, we would recommend the udder to be rubbed several times a day, with a mild camphorated liniment, and the body should also be well clothed. Many other remedies can be resorted to, but those have been mentioned that can usually be readily procured, and when resorted to will frequently check the progress of the disease. Blisters and irritant dressings we do not recommend, as the most desirable results can be accomplished by these safe and simple remedies.

#### WARTS.

The teats are very liable to warts and other abnormal growths, both externally and internally, and although they are not attended with any serious consequences, yet they often create an irritation and suffering that may impair the secretion of milk, and also render the operation of milking difficult to perform.

When situated in the inner part, they may be felt on compressing the teat between the finger and the thumb, and can be removed by means of a silver probe, or by the concealed bistoury, but in doing so no unnecessary violence should be used, as inflammation might be set up in the quarter.

When forming externally, they can be removed either by the knife or ligature, and dressed with a mild caustic, afterwards applying morning and night, immediately after milking, a small quantity of sulphate of zinc ointment, about the strength of one drachm of sulphate of zinc to two ounces of lard.

#### STRICTURE OF DUCT.

Many a valuable cow becomes, comparatively speaking, worthless from stricture of the duct, which may diminish or completely stop the flow of milk. The stricture is often brought on from exposure to cold, or it may be caused by growths or tumours irritating the mucous membrane. Frequently, in young cows, the opening of the teat is not

sufficiently large to allow the milk to flow freely, and the force required to draw the milk from the quarter may induce disease.

Many of these cases can be relieved by the use of the concealed bistoury, which can be safely introduced into the teat, and the duct enlarged.

#### FOOT AND MOUTH DISEASE.

As already mentioned, considerable alarm has lately been created in the State of New York, from the appearance amongst the cattle in various districts of a disease called Foot and Mouth Disease, and it has also been stated that the malady had been introduced through the medium of Canadian cattle going directly from Canada.

We have no hesitation in saying that the disease in question is altogether unknown among the cattle of our Province, and if they have it in the neighbouring Republic, in all probability it has been imported directly from England.

It may not prove uninteresting to notice briefly the nature and symptoms of this complaint, as some of them are somewhat similar to other affections that are not of a contagious nature.

The name Foot and Mouth Disease is applied from the symptoms developed in the mouth and about the feet. It is also called epizootic aphtha, exema epizootica, murrain, and so forth.

Epizootic aphtha is an eruptive fever attacking the ox, the sheep, the pig and the horse. It is highly contagious. It first appeared in Britain about thirty years ago, and it is doubtful if that country has been entirely clear of it since that period. Long before that time it was noticed on the continent of Europe, which appears to be the hot-bed for epizootic diseases of a contagious nature.

In 1861 it prevailed to an alarming extent in England, and during the past year it has again broken out with increased virulence. According to the *Veterinarian* of December, in the month of October there were over 3,000 centres of infection in Britain.

Epizootic aphtha is a disease that is easily detected. It generally begins with a shivering fit, after which there is a marked dullness, a staring coat, and an increased frequency of the pulse. The temperature of the body is increased, which can be readily detected by a small thermometer introduced into the mouth or rectum; the appetite is impaired, and there is a discharge of saliva from the mouth, of a ropy, sticky nature; rumination is suspended, and the animal quits its food; there is lameness in the feet, and small vesicles appear between the divisions of the foot, and also around the coronet and the whole secreting structures may be so severely inflamed as to lead to casting of the hoofs. Vesicles also appear on the mucous membrane of the mouth, and on the tongue. These vesicles vary greatly in size, and they soon burst and discharge their con-