

THE HORSE.

Sterility in Mares.

Sterility, either temporary or permanent, is not uncommon in mares. It may depend upon physical or organic causes, and may cause permanent barrenness. Of course, hermaphrodites will not reproduce, and of course, hybrids seldom do; but in this article we refer to mares that are apparently normal and healthy. Mares that have not been bred until well advanced in years, and then retired to the stud frequently prove infertile, or mares that have been bred when young, and infertile, or mares that have reached an advanced age before being bred then allowed to reach an advanced age before being bred again, will often fail to reproduce. The infertile mares in these cases are probably due to the genital organs having lost their power from prolonged want of function. Nothing can be done to restore the activity of the genital organs. Change of climate, in many cases, has a temporary influence on fecundity; and in some cases a permanent influence on fecundity; in most cases this influence when the mare becomes acclimatized, in a few months or a year. Poor hygiene also may cause sterility, but this can usually be remedied by changing to favorable conditions. Under-fed or over-fed mares do not breed with the same regularity as those in moderate conditions. This is especially the case with very fat mares. The means of removing these causes of sterility are obvious. Excitable or vicious mares do not breed with the same regularity as those of a quiet, gentle disposition. It is claimed by some that, with mares accustomed to work, active exertion, that sufficient to produce fatigue, before being bred, is favorable to conception. The Arab used to gallop his mare for a long distance, then breed her, and allow her to rest for several hours. Diseases or alterations of the generative organs, as the ovaries, fallopian tubes, uterus or vagina, often prevent conception. When such diseases become chronic, they usually cause permanent sterility, although they may not apparently interfere with the mare's comfort or general usefulness. In fact, such diseases are often present and the only circumstances that lead to the suspicion of their presence is the animal's failure to conceive. Irregular oestrus, occurring either too frequently, or at too long or irregular intervals, indicate disease of the ovaries. In some cases of diseased ovaries the animal shows prolonged or continuous oestrus. Such a female is called a nymphomaniac; but diseases of the other organs of generation, and in some cases even of the ovaries, sufficient to prevent conception, may be present and, at the same time, the periods of oestrus appear at irregular intervals, and nothing abnormal can be detected, except a failure to conceive. It is seldom that treatment for suspected disease, as above, is successful.

Doubtless a somewhat common cause of sterility, especially in a nervous mare, is a spasmodic contraction of the passage through the neck of the womb (called the os uteri) during the act of copulation. This, of course, prevents the entrance of the semen into the womb. Mares in which sterility is due to this cause may be artificially impregnated. Artificial impregnation can be performed in different ways. Probably the most popular method is as follows: A rubber capsule, and a syringe especially designed for the purpose, is purchased from dealers in veterinary instruments. The syringe is immersed in a warm, sterilized solution, as a two-percent. solution of carbolic acid in warm water, kept at a temperature of 100 degrees Fahrenheit. The capsule is sterilized in a similar solution and placed over the head of the stallion's penis, and the act of copulation then performed. When the act is completed, the capsule containing the semen is removed, placed in the solution in order to retain the required temperature. A quantity of the semen is drawn into the syringe and injected into the uterus. The operator, having disinfected his hand and arm, introduces his hand into the vagina, directs the nozzle of the syringe through the os uteri into the uterus and then shoves the piston. It is possible to impregnate several mares with the result of one act of copulation, if the mares are in oestrus. Probably the most common cause of sterility is a chronic closure of the os uteri. In all cases where mares repeatedly fail to conceive, it is wise to examine the os. This is done by inserting the oiled and sterilized hand into the vagina until the fingers reach the os. In normal cases the finger can be readily passed through the os into the womb, but where there is a chronic closure, the opening must be forcibly dilated by a rotary motion of the finger. In some cases the finger has not sufficient power, and an instrument especially designed for the purpose must be used. There are cases in which there is a tough, fibrous

growth surrounding the os, in which cases an entrance cannot be made without cutting. In such cases it is wise to allow the mare to remain barren. After the os has been dilated, as described, the mare should be allowed to stand for a couple of hours and then bred.

It is claimed that a common cause of sterility is an acid condition of the vagina and uterus, and what is known as the "yeast treatment" is often successful. This consists in adding to an ordinary yeast cake, sufficient water to moisten, and allowing it to stand for about twelve hours in a moderate temperature. Then add, with brisk stirring, a pint of warm recently-boiled water, and allow this to stand ten or twelve hours. It is now ready for use. It is heated to about 100 degrees Fahrenheit, and with a sterilized syringe injected into the vagina and a little into the uterus. The mare should be bred the next day. Unfortunately, there are many obscure and unremovable causes of sterility in females. When the general appearance of an animal is healthy, and a manual examination of the organs reveals a normal condition, and, at the same time, repeated attempts fail to cause conception, we are generally justified in assuming that there is some chronic disease of the generative organs that cannot be corrected. WHIP.

LIVE STOCK.

Quality is important in feeding steers as well as in pedigreed cattle.

Pigs need more water during the summer than when the weather is cold.

Those crippled pigs will be helped by being turned out of doors. The fresh soil and warm sun have healing qualities.



Field Marshall 5th.

Awarded the stallion championship at the recent London Show. Owned by His Majesty the King.

How long will it be before a township or county in Ontario can proclaim that "no scrub sires are to be found within their boundaries?"

Pigs cannot be expected to thrive when forced to remain in a pen knee deep in manure. If there isn't time to clean the pen turn the pigs on grass.

In many localities the stock seen on pasture is very thin, and to make matters worse the grass is short. This is a poor combination for making profits.

When sheep are allowed to run on the roads or commons, the owner should not complain if a few are accidentally killed. The road is no place for sheep.

Just because the price of long wool is not what it was during the past two years, sheep owners should not be discouraged and reduce the size of their flocks.

The manner in which pigs are fed is particularly responsible for the gains they make. Feed isn't everything. Pigs must be looked after as well as fed.

If the calves are turned on grass use them well. Give them a chance to get grain and also shelter if you want them to grow and improve as rapidly as possible.

A Canadian-bred Aberdeen-Angus cow recently sold at a sale in United States for \$7,100. She was by Evereux of Harviestoun, and out of Queenston Envy Not.

On the city market recently some consumers were complaining about the price of butter, now that cattle are on grass. The price of grass may be no dearer than a year ago, but there is less of it and the cows are not in condition. The problems of the producer are foreign to many consumers.

Those fences turned over by the wind storm last fall have increased the spring's work on many farms. All fences should be in repair before stock are turned out. Once they break through it takes a particularly good fence to hold them.

The stockman with a quantity of skim-milk available is in a better position to make economical gains with his hogs than the man who depends on grain and green feed alone. Tankage and blood meal are substitutes for skim-milk.

Do not seize the sheep by the wool when catching it. The wool on the body of the sheep stands in the same relation to its body as the hair does to your head. Think and be gentle. Catch the sheep either by the jaw or the flank. If you wish to catch a sheep that is moving away from you, step quickly up to it and catch the flank. In this manner you will not have any difficulty in holding it while you reach with the other hand and catch it under the jaw. When the animal is moving toward you, catch it by the jaw at once. Hold a sheep by standing or kneeling on one knee at the left side of the animal, place one hand under the jaw and the other on top of the head. This method is convenient, simple, effective and is not unpleasant to the sheep.

Quality and What it Means.

There is hardly any term connected with live-stock breeding which means so much, and yet is so difficult to define as quality. Every breeder, whatever class of stock he may breed, recognizes the value and importance of quality in any pure-bred animal. He knows full well what quality is when it is there, and yet very few can really describe what the term conveys to their mind. The phrase quality is inclusive of many other attributes besides handling, and yet there is no animal which does not need the "touch" of the human fingers in some portion or other of its anatomy before it can be actually judged worthy of the definition "full of quality." Take the Hunter, for example. What must we look for in a "quality" Hunter? Surely something more than the aptitude to convert a lot of oats and hay into flesh and muscle. To say a Hunter is full of quality means that his whole outlook is one of high breeding and refinement. His coat, his skin, the texture of his bone, which must be "handled" to see if it is of the proper flat and whalebone sort which wears, are all indicative of quality, and have nothing whatever to do with his ability to convert oats and hay quickly into flesh and muscle. The last named comes from training and exercise, and some horses are far better doers than others; but horses of the highest quality may be bad feeders all the same.

When we speak of a Shire as possessing quality we surely mean the texture of his bone and feather, of the coat and skin, and his well-bred refined look. We often refer to a horse as looking or walking like a gentleman. These are the sort which usually can be defined as possessing quality, not the gross, common-bred looking creature, however fat and full of muscle he may be. A judge of quality can tell if a horse is possessed of it, even when running rough about in the fields in winter. It has nothing to do with condition, but it has everything to do with the appearance of good breeding.

And so in cattle. "touch" or "handling" play a greater part in making up the term quality as applied to cattle; but there are many other attributes which a beast must have before it can truly be said to be of good quality. As regards cattle, it is granted at the outset that aptitude to convert feed quickly into flesh is an important sign that quality is there, so is the mellow touch of the skin and hair, which denote the aptitude to fatten; but, in addition to all this, there must be not only a mellow touch, skin and hair having a velvety feel, but there must be the aptitude to lay on flesh firmly in the proper places and on a symmetrical form, and all that does not go far enough to indicate quality. There must be a highly refined appearance, showing good breeding. Without handling, how is it possible to tell the feel of the skin and coat, or the firmness of flesh? Silks and satins are of many qualities, but it is necessary to handle them to tell which are of the highest quality. There may be a score of well-fleshed cattle in a bunch together, all of which may be described as good feeding animals; but probably there may be only two or three, or even none, which can be described as possessing quality. We all agree that quality is quite visible to the naked eye of a good judge, and if he cannot define the term he knows it when he sees it and recognizes its full value.

Quality in sheep is usually found in the color and texture of the skin, and in the texture and staple of the fleece, in addition to the grain of the mutton and freedom from coarseness in every way. Now, quality in sheep is denoted to a great extent by the "handle," and let anyone put his hand on the back of a pedigree Shropshire or Southdown teg in any market, and then let him try the backs of any sheep of the larger and coarser breeds, and if he has any intelligence he will soon feel the actual touch of quality.

Now as to the pigs. Some pigs are just as full of quality as others are coarse, yet the coarser animal may be capable of converting a lot of feed into bacon in a fairly short time; but in a pig the skin, the abundance and texture of the hair, the touch of his flesh, the absence of all coarseness, and the form of his carcass, all go to build up the meaning of the word quality as applied to him, as well as aptitude to feed and the possession of a good admixture of flesh and fat. A highly-bred pig can never be coarse. He is bound to show quality in

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