

*The Value of the Knowledge of Veterinary
Science to the Farmer.*

By Chas. R. Pearson.

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In the various branches which are related to agriculture there is perhaps no study needed more and studied less than that of Veterinary Science.

I do not mean that every farmer should be a Veterinary Surgeon, for under that branch we find as many complicated problems as in any science.

But I mean that every farmer should have a good clear understanding of the more common principles which are called for in every day life in the care of his stock. From a moral standpoint the care we give our stock should be next to the care of ourselves, but too often they are the last thing we think of. There is also a financial side to the care of stock and of this alone I wish to speak.

When we see a man unhitch his horses from a harvester and take them to a water trough for a cold drink of water we are sure that he is a person who often has sick horses and not only sick ones but dead ones. Cold water on a sweaty horse's stomach means deranged digestion

and in a large percent of the cases spasmodic colic is the immediate result. This disease is caused by any foreign substance in the stomach. It is a spasmodic contraction of the muscular walls of the intestines. It is a painful disease and very dangerous because it is liable to run into inflammation of the bowels and if it does the percent of loss is very great even under expert treatment.

Another grave mistake which the uninformed farmer makes is in feeding his horse a heavy feed of grain and then giving him a drink of water. This causes impaired digestion - indigestion. A dozen diseases could be named under this head. Ninety five percent of all sick horses on the farm come from improper feeding.

Fast driving against the wind is one of the most dangerous things that can be practiced, and is thought about usually just when it is too late to save the horse's life. A horse can be killed in a short time by a thoughtless boy who has never been forewarned of its dangers. Congestion of the lungs, lung fever and

inflammation of the lungs are caused by hard and fast driving against the wind.

Life in the human family has been lengthened at least thirty percent, according to English statistics for the last seventy five years. The cause of this has been the great advancement in medicine and surgery and also the general education of the people in the rules of sanitary and hygiene which have been carefully worked out by the combined effort of the physiologist and bacteriologist. These same rules are applicable with a little modification to the lower animals, but there has not been very much advancement in veterinary science until within the last quarter of a century.

The breeding of stock has been studied and written about so much in the last few years that it has become a science and first class works are accessible to every one. A most excellent work in a condensed form is that of Dr. Miles, and a study of that will put a farmer in

a real good shape to take advantage of what has been learned by long observation. A study of such literature places a farmer in a position to apply those principles of animal hygiene which are called for in every day life on the stock farm.

A knowledge of how to treat a case of difficult parturition is essential to every keeper of stock. With horses there is very little difficulty, but with cattle and swine there are always several cases each year even with a small herd. The farmers distance from a good veterinarian makes it impossible to employ one in every such case and it is much better to take care of the case himself than to pay a quack who does not know half as much about such things as the average good farmer who has a little confidence and previous study, and, besides, to employ an expert costs perhaps more than the calf will be worth at the end of six months. It does not need a professional obstetrician to care for the ordinary case.

When a cow is seen to have difficulty in calving the first thing to do is to take off the coat and if not too cold the shirt and cover the arm well with some antiseptic solution as Carbolic acid and water, one to forty or corrosive sublimate one to a thousand. Then he is to insert the hand and take a soft rope to fasten to any convenient part of the foetus, This is to keep the foetus from slipping back so far that it will be out of reach. Then push the foetus back.

A normal presentation is with the head between the fore legs, but often a leg is back, or any imaginable difficulty or deviation from the normal. When the leg is got up and the foetus is in proper position, and by helping the mother when the labor pains are on. the exit is quickly made and the calf's life and probably the cow's, also, is saved.

Another presentation known as the rear end presentation is a very common one, in which the two hind legs appear first various modifications from this often happen. A leg may be bent

back on something else be wrong. To obviate the difficulty proceed as before but take the foetus out hind legs first.

I do not propose to write a treatise on this subject but just enough to show that with a little study and observation one can save the life of many an animal on the farm and without any great amount of preparation on his part. And besides he will have the satisfaction of knowing how such things are done and even if he should wish to employ some one else he would know whether it was done right or not. I have known farmers to let a cow go with the after birth in them often colving, having not the least idea how to remove it until inflammation would set in and the poor animal would die of blood poisoning. When a slight knowledge of the anatomy of the parts would enable them to remove the after birth in a few minutes.

To take up an artery and tie it is not beyond any person who has had a little instruction or has seen it done

once. Yet I saw a man - an intelligent person too - ride five miles when a horse got cut on a barbed wire fence to get a person to come to take up the artery and when he got back his son was plowing corn with the horse. The injury was only a bad cut on the inside of the hind leg of the horse and the horse was as well as ever. A little fore thought on a few weeks of lectures such as are received at this college would have saved all this time and worry, and the two dollars which he paid the doctor.

A place to keep a sick animal that he may have the proper care is a thing which is only fully appreciated by one who has turned his attention in this direction. Dr. Mayo says that more sick animals die on the farm for want of proper nursing than from anything else. It is absolutely essential that to take the best care of a sick horse, and to be prepared for all emergencies that a farmer should have a good large box stall built for the purpose. It should be about ten by fourteen

and have a high ceiling, and should be well lighted and ventilated, ceiled up tight in the inside and have a good plank floor. A sick animal can be kept in this where he may be kept quiet, and the temperature may be regulated. which is no small item in the lung diseases and in many others. Such a stall permits isolation from healthy mates and when he leaves it can be disinfected and white washed to kill all the contagious germs. He may be turned loose in the stall in by the use of rings in the ceiling may be hung up for broken legs or dislocated joints. Such a stall can be fitted up for any convenience and besides it furnishes a good clean place to work.

The most useful of all the knowledge of veterinary science is how contagious diseases are communicated and by this we learn how to avoid them. By a thorough understanding of the disease, pleuropneumonia, governments by the aid of their farmers have been able to stamp it out. The study of the germs of cholera saved

no end of lives in Europe and the same will be true of tuberculosis which no doubt, will be exterminated sometime from all our valuable herds of cattle.

This disease is the most disastrous disease which man has to cope with for it is communicated from man to beast and from beast to man.

The cause of this disease is the germ, *Bacillus Tuberculosis* a minute unicellular plant. It has been estimated that seventy percent of all the human race that die in the large cities die of this disease. The germs of consumption are every where. In the dust we inhale on our clothing, in our newspapers, in the milk we drink. In fact every where where man and diseased animal have been. The Ontario experiment station have been testing the cattle of Ontario for tuberculosis and every head tested so far has had from twenty five to seventy percent of its numbers diseased with tuberculosis.

There is hardly a herd of short horns

Jerseys, Holsteines or Hereford cattle (pure bloods) free from the disease, tuberculosis. And it is very important that a man who buys a thorough bred bull to turn in with his common cattle should exercise the utmost care lest consumption be introduced into his herd.

Common cattle are as yet comparatively free from the disease, but if they are exposed by coming in contact with high bred cattle, having the disease, which are being bred to them to raise the standard of the common scrub, it will not be many years before they are as badly affected as the poor breeds are to day.

The symptoms are: Falling off in flesh, a hacking cough, and difficult breathing. Though the disease may be in the system for the whole life of the animal without showing any of these symptoms very prominently. No farmer should place a pure blooded animal in his herd without first testing in for tuberculosis with the tuberculin test, which consists in giving

the animal a hypodermic injection of tuberculin a chemical product of the germs of the disease. If the bacilli are in the system there will be a marked rise in temperature of from two to five degrees which will remain so for several hours. Although this test is not absolutely reliable it is the shurest known at present and now animal showing such a rise in temperature should be placed in a healthy herd.

It will not be long until the government takes the matter in hand as they have pleuro-pneumonia and exterminate all cattle having this disease. And the man who has such stock on his premises will have to stand the expense of quarantine. Though the government may pay for the stock it will hardly pay for the trouble such stock has cost.