all. To-day American agricultural colleges are reaching hundreds where a decade ago they did not reach tens. They have extended their sphere and carried their work to thousands who never saw the outside of their walls. And their extension will be carried still further. Ultimately they will include everything in agriculture that poses as an educational institution. There will be more professors lecturing to outside classes in every college in ten years than now form the faculties of those institutions. There are unlimited possibilities for the men who are now directing college extension work among the farmers of this continent, as well are there possibilities for those who are directing the institutes' affairs. But the greatest benefit will accrue to the agricultural community when the two forces are one in organization as in purpose.

A unification of interests such as this is bound to come. The difficulty that will arise will be the procuring of men fair and large minded enough to direct the work of the amalgamated organizations without unduly favoring either. The average college principal of the present day, placed in such a position, would be inclined to favor the work with which he was directly in touch, and thus the real scope of the institute work be lessened as we know in some instances by such arrangement it has been. But despite these drawbacks, which are more in the men than in the principle of the thing, the closer union of the college and institute has much to commend it and it will be a fortunate thing for Canadian and American agriculture when a closer bond is drawn between the two.

The Money Stringency Again.

EDITOR FARMER'S ADVOCATE:

In your issue of November 6th I notice a reference to the money stringency in which the claim is made that the chief cause of the tightness of the money market lies in the movement of a few million dollars toward the storm centre in New York, for the purpose of relieving the pressure in the financial vortex of the continent. It strikes me that this statement is rather broad. Money is a fluid commodity, it moves naturally towards those centres where the demand is greatest, and the recent trouble from New York has brought gold from England and from the Continent to relieve the situation. If your statement were true the financial stringency all over America must be due to local causes. It's a brilliant theory: Canada suffers because the bankers lend money in New York; Seattle because her bankers forward gold to San Francisco and "Frisco" because her moneyed men ship the yellow metal to Chicago. Before we go any further, would it not be better to stop and find a solution that has a broader basis of thought.

All wealth comes from land. We have good times when the amount of wealth actually produced provides "accommodation" for the industrial and commercial life of the country. Now we have had a period during which agriculture, commerce and industry have made great progress. Railroads and manufacturing have used up a tremendous amount of capital. *Any derived industry, during a period of prosperity makes more rapid progress than a basic industry such as agriculture.* The reason is plain. Agriculture can never become so thoroughly organized as, for instance, a [illegible] corporation, nor can the unit intelligence [illegible] is represented by the single farmer, have [illegible] directive intelligence of the trust manager [illegible] the business of the capitalistic organ[illegible]. Hence, we find the amount of wealth [illegible] the land is insufficient to provide [illegible] capital for the further expansion of [illegible] then we get economy, retrenchment, a[illegible] of values until production has again [illegible] equilibrium.

This may all be wrong, but [illegible] gestion that it holds a measure [illegible] least I have had my guess and [illegible] yours and still the money market [illegible] least it does to me.

L. E. CARR.

HORSE

Lameness in Horses.

RINGBONE.

Ringbone is a term applied to a bony deposit situated between the fetlock and coffin joints. The deposit may encircle the whole limb, or may be noticeable only on one or both sides, or in front only, but is called ringbone in all cases.

Ringbone is of two kinds, true and false. False ringbone is an exostosis (a bony growth) on the bone between the fetlock and pastern joint, but does not involve either joint, and does not cause lameness except in very rare cases, when it is very large. Some consider that it does not constitute unsoundness, but, as there is a danger of the growth extending and involving the joint, we think a horse affected should be considered unsound.

True ringbone is one in which either the coffin or pastern joint, or both, are involved. When the coffin joint is diseased, it is called low ringbone, and when the pastern is the seat, high ringbone. By involving the articulations, these cause more or less acute, obstinate, and, in some cases, incurable lameness. Ringbones, whether high or low, vary greatly in size, but the degree of lameness is not by any means indicated by the size. An animal with but a small deposit may go very lame, while another with a large growth may show little lameness.

Causes.—In most cases there is an hereditary predisposition, and if the pedigree of the animal affected can be traced back for several generations it will generally be found that an ancestor, more or less remote, suffered from the disease. It is usually caused by simple concussion during progression. By this means inflammation is set up in the inner (called the cancellated tissue) structure of the bone. This extends and involves the outer structure (called the compact tissue); an exudate is thrown out which becomes converted into bone, causing the visible enlargements. When a joint is involved, the cartilage covering the ends of the bones is destroyed, and this causes acute lameness. While it is doubtless possible for a ringbone to result from an external injury, as a kick, blow, etc., it is very seldom such occurs.

Symptoms.—In the majority of cases lameness is irregular, very acute occasionally, not well marked at times, and sometimes entirely absent in the early stages, but as the disease advances and the joint or joints become more thoroughly involved, lameness becomes permanent, and more or less acute. In cases where the coffin joint (which is situated within the hoof) is diseased, lameness is often apparent for a considerable time before any enlargement can be noticed, as there is no visible enlargement until it extends up the pastern bone and shows above the hoof. Lameness from this cause is often hard to diagnose as there is no visible cause; but the enlargement will soon became apparent, when the diagnosis can be confirmed.

The somewhat common idea that ringbone is due to the presence of some abnormal organ or object called "the feeder," and that the removal of this, by cutting into the fetlock pad and dissecting out a small quantity of fat or other tissue, is, of course, totally without foundation. Ringbone is purely a disease of bone; it originates in bone, and while it involves and in many cases destroys other tissue, it is essentially a bone disease, and should be treated as such.

The inflammatory action continues, and the exudate thrown out becomes ossified (converted into bone). When the articular cartilage of a joint is involved, it becomes destroyed, and, as the process of ossification continues, the bones of the joint become united (this process is called anch[illegible]), and, of course, ceases to exist as a joint, [illegible] bones being united into one. When anch[illegible] has become complete, inflammation subs[illegible] lameness ceases. There may be fau[illegible], owing to the stiff joint, but pain is no [illegible] present and the animal will go practica[illegible] notwithstanding the absence of the joint.

Tr[illegible] In treating a case of ringbone, the prac[illegible] aims at curing the lameness [illegible]. He [illegible] attempt to remove the enlargement [illegible] is a growth of bone [illegible]

[illegible]

ment. Treatment should be directed to the hastening on of the process of anchylosis, for, so long as this is not complete lameness will be shown. This is done by counter irritation, in the form of blisters or firing, which sets up a superficial irritation, increases the internal inflammation, and thereby hastens the subsidence of the same. In quite young animals repeated blisterings may effect a cure, but in the majority of cases it is better to fire and blister at once. This should be done by a veterinarian. It is often noticed that the patient will continue to go lame for a considerable time, sometimes for eight or ten months or even longer, after the operation as the process mentioned is often slow. When a recovery has not taken place in ten to twelve months, it is well to fire again, and if this fails to effect a cure, we may decide that the case is incurable, and the only means of removing the lameness is by the operation of neurotomy, which consists in removing the nerve supply to the foot. This operation can be performed only by a veterinarian. It does not cure the disease, but cures the lameness by removing sensation. As the process of decay and repair goes on in the foot after the operation, and the animal will not show any symptoms of pain, and hence is liable to become totally useless, from various causes, it is not considered wise to operate except in cases where the animal is practically useless from severe lameness.

"WHIP."

Quality in Horses.

FROM A PAPER READ BEFORE THE VETERINARY ASSOCIATION OF NEW YORK, BY F. C. GRENSIDE.

There is no subject upon which there seems to be more diversity of opinion amongst horsemen than as to what constitutes "quality" in a horse. It is a term in very common use, but if you ask a number of horsemen what they mean by it you are sure to get a variety of answers. One will say it means breeding; another conformation; another finish; another "class"; another symmetry; another individuality; another an accentuation of all fine points; another magnetism; another refinement of lines; or perhaps a combination of some or all of these attributes. Some say that quality is recognisable but indefinable and unexplainable.

The term "quality" is an abstract one, indicating a special attribute in an individual, just as being well bred, well conformed and possessing finish are attributes of some individuals. When one says that a horse has "quality" one means that he has a special attribute which may or may not be combined with any or all of the others mentioned. Of course there are varying degrees of "quality," so that the term can only be used in a comparative sense. In the light classes of horses it is very often used synonymously with breeding. Certainly the more warm blooded a horse is, the higher the degree of quality he is apt to possess; but one may take two equally well-bred thoroughbreds and find one showing evidence of the possession of a higher degree of quality than the other, so that breeding and quality do not mean the same. Neither does quality signify the possession of symmetry, good conformation, finish or "class." A horse may be defective in any or all of these respects, and still possess a high degree of "quality." He may be fiddle-headed, lop-eared, ewe-necked, sway-backed, flat-sided, slack-loined, cow-hocked or calf-kneed, and yet show much "quality."

Much confusion is caused by using the term "quality" synonymously with "class." Horses are spoken of as high class, medium class, and so on, indicating the degree of excellence which they possess for the purpose for which they are best suited. Two individuals can be taken as an example showing equal "quality," but one of them, on account of better conformation, more style and action, may be worth twice as much as the other, consequently he is a higher class individual, although the two are equal in "quality"; so that "quality" and class" do not mean the same.

If, then, "quality" does not mean breeding, or conformation, or symmetry, or finish, or "class," or a combination of any or all of these, what does it mean? It is an easier matter to explain what constitutes "quality" than it is to give a concise and at the same time comprehensive definition of what it is. It may no[illegible] be defined as fineness in contradistinction [illegible] coarseness of texture. How frequently