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ventrical, while in the Lizards it has two auricles and two ventricles, though the septum between the two ventricles is incomplete.

In Eastern Canada we have no Lizards except the Blue-tailed Skink, which is only found in the extreme south-west of the Ontario peninsula. In British Columbia there is a little Lizard which is not uncommon, known by the rather formidable name of the Northern Alligator Lizard.

A plant which always arouses the interest of those who notice it in the woods is the Indian Pipe, shown in our illustration. Its waxy whiteits rigidity and its shape mark it off as something different from ordinary plants, and many are puzzled as to what sort of a plant it is, some being inclined to think it is a fungus. As a matter of fact it is a flowering plant and belongs to the Heath Family-the same family to which the Blueberry, Cranberry, and Wintergreen belong. Its peculiar color, or rather lack of color, is due to the absence of chlorophyll, and it is able to do without this substance so necessary to most plants to enable them to manufacture their food because it lives on dead plant matter. If we dig it up we find no ordinary root, but a mass of fibrous rootlets. These rootlets contain little knots of a threadlike fungus, and it is through the agency of this fungus that the Indian Pipe is able to feed on dead plant remains. Thus it is what is termed a Saprophyte, and not a parasite, since parasites feed on living matter. The Indian Pipe is wellnamed and another name which is extremely suggestive, not only of its appearance but also of the dark woods in which it is usually found, is Ghost Flower.

THE HORSE.

A Question of Service.

Many a good stallion has been ruined by too frequent service and "doping." Horsen en differ in their methods of handling stallions during the breeding season just as mare owners have different ways of caring for mares. We have known good horsemen to allow their valuable stallions to cover mares every two hours and during the rush of the breeding season keep this up day after day well into the night. Other horse owners do not believe that a horse should be used so frequently. In talking with a Western Ontario stallion owner a few days ago he said that he never allowed his horses to serve more than three mares a day. giving them complete rest on Sunday. Is this a practice than breeding mares every two It would seem that there is a chance that a horse over-worked will not prove sure but what we want to get at is; when is a horse over-worked? And how should he be handled to ensure mare owners of a high percentage of strong living foals? The season is nearly over but thousands of mares will be bred during the next two months and a little discussion might prove valuable. By the way, it might prove profitable breed some of those mares held over until this time now that the season is advanced and the sires will not be so over-taxed.

Possibly the Last Importation.

The other day, while looking at a fine Percheron stallion imported from France before the war, and thinking what a pity that so many of this class of horses were being destroyed in the conflict, the owner, a prominent horseman, remarked that he had a good horse and was going to keep him because he felt sure that this would be the last Percheron horse he would be able to bring from France during the remainder of his life. This statement brings the whole situation vividly before one. The importer, a man of middle age, does not expect to be able to get any more horses in France, and he is not the only one, for most of the horsemen in America are of the same opinion. There is a note of warning in this for the man owning a good stallion and also for the man having in his possession valuable brood mares. Not only from France will the supply be cut off but also from Belgium and from Great Britain. These have been the breeding grounds upon which breeders in America have drawn for new blood for years. Deprived of this the horse-breeding industry in this country must look to itself for improvement. It is necessary, then, that every good stallion be kept and properly cared for. The importer kept and properly cared for. The importer who owned the Percheron stallion mentioned undoubtedly has the right idea, because he feels certain that this good horse should be made the most of in the hope of maintaining and improving the quality of the horse stock of the country. should every stallion whose breeding and individuality warrant be kept under the best possible conditions at the stud in this country. The owners of good mares should also put away all carelessness and take it upon themselves to do their part in the situation. There is no excuse at the present time for breeding good

manders it consists of two auricles and one mares to poor horses, and, notwithstanding the fact that horses have not been selling as readily as they might have done, there is excuse for refraining from breeding all the available mares. It is only necessary to go back to the statement of this particular horseman and think what it means. For years to come very few horses are likely to come out of Europe to America. Thousands upon thousands are being destroyed in hattle and the old breeding grounds ruined. It is rather a serious matter and one worthy the thought and action of every man in Canada interested in the future of horse breeding. Good horses may be at a premium sooner than we now think.

A Quality Colt.

While it is important that every draft horse show an abundance of size and constitutional vigor, it is equally imperative that the animal have that something about it which every good horseman knows as quality. Quality is hard to explain, but not difficult to recognize in a horse. The accompanying illustration of a colt which has been a champion in the Old Land shows very clearly what is meant by quality in a Clydesdale and quality in one breed of drafters is not very different from quality in another, barring, of course, certain breed characteristics. The colt here shown has plenty of size for its age, being only a yearling at the time the photograph was taken, and we wish our readers to particularly note the flat, clean, hard-appearing bone and the reat spring of pastern. It is not often that a photograph shows spring of pastern quite so well as this one does. This is the slope which the



Causes of Bone-chewing and Similar Abnormal Cravings in Cattle.

Editor "The Farmer's Advocate":

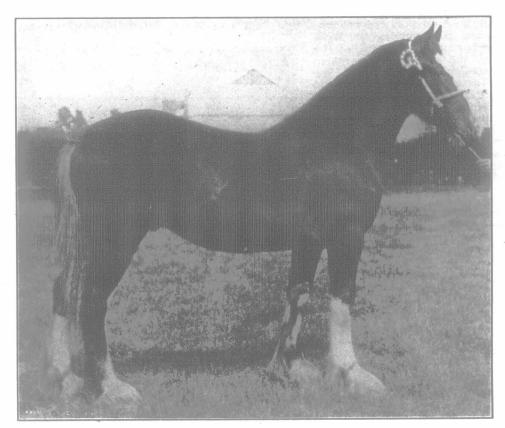
From time to time enquiries are received regarding certain abnormal cravings of cattle evidenced by the chewing and swallowing of such material as wood, earth, cloth, old sacks, leather, bones, etc. While with the herds at the Central Experimental Farm at Ottawa, no such abnormality has ever been noted, more or less information concerning it has come to hand, a brief summary of which follows.

The craving of animals for unnatural material may be simply classified as to cause, as follows :-

(1) The phenomena may appear during the early spring months when cattle have access to organic and mineral substances. Where animals are wintered on a poor maintenance ration composed largely of hay and straw, the necessary mineral constituents may fall short of the animal's requirements; particularly if but little succulent feed is used. The lack of salt during the winter months will frequently cause the mineral requirements to fall well below what should be present in the animal system.

With all or any of the latter conditions present, animals, during early spring, will frequently eat earth, wood, or any of the substances enumerated. As soon, however, as the normal balance of the system is regained by this direct method, the animals will show no more signs of this abnormal appetite. For the control of this condition prophylactic measures are the major

consideration.



A Quality Colt.

Ulydesdale man likes in a horse's pastern and which is an indication of quality and strength. The feet do not show very well in the illustration but the reader can easily see that they are large and have prominent hoof heads. The only thing not clear and distinct is the depth of the heel which should be well marked. The photograph also shows a fine quality of feather. This is important, because, as a general thing with hairylegged horses, the quality of the hair, that is whether it is fine or coarse, denotes the quality of bone the animal carries. Whether or not there is a direct connection the fact remains that as a general thing a horse with fine, silky hair on its legs shows hard, flat, flinty bone, while on the other hand, the horse with coarse hair, knotted and curly, generally is set upon round, coarse, Take notice also of the slope of meaty legs. shoulders in this horse and the muscling of forearm, as well as the general smoothness and uniformity shown. It requires some little practice with horses to be able to distinguish all the earmarks of quality on sight, but with a Wittle practice and a little study of good horses and illustrations it is not so difficult for the amateur to become fairly familiar with quality in draft horses and able to recognize it on every occasion.

All the causes of underproduction, not only in farm crops but in all industries with a direct bearing on the outcome of the war, should be ferreted out and remedied if possible by individual effort. If the people will not cure the ills of the nation voluntarily then legislation should.

Where animals have been fed a well-balanced ration, whether for fattening, milk production, merely for maintenance,-where at least part of this ration has been produced elsewhere than locally,—where roots make up part of the ration, and particularly where salt is used freely, preferably accessible at all times, the mineral requirements of the animal system are usually met with.

(2) Individuals of herds frequently show this peculiarity in the form of a habit or vice similar to bing" in horses; in others similarly affected the cause may be a functional defect or abnormality, or some lack in the metabolism of

A specific cause for the the animals. latter cases is of course difficult to give, as isolated cases may appear in the best-regulated In persistent cases, however, the treatments to be outlined might be of benefit. Isolated, cases are, however, rare.

(3) While the term "bone-chewing" is used more or less erroneously to describe the condition outlined in sections 1 and 2 it correctly relates to a disease known technically as "osteo-malacia. While this disease in its true and worst form is perhaps rarely found in Canada, cattle in certain localities have shown symptoms closely approximating it, the cause being, in all likelihood, the same in all cases.

BONE-CHEWING (OSTEO-MALACIA)-

Symptoms.—The actual symptoms of this disease are frequently preceded by digestive dis-turbances. Cattle will be noticed to lick stalls, mangers, iron fastenings, etc. Usually a disposition is shown to lick and swallow objects containing lime, although portions of wood, leather, etc., are frequently swallowed. Later the craving may turn toward material of an offensive nature, feces, decaying flesh, urine, etc. The appetite for the regular ration, however tempting, is capricious, the animal eating less and less until emaciation becomes manifest, with harsh, dry hair, suspended rumination, and diarrhoea.

The movements of the animal are characteristic, the walk being stiff with lameness apparent, the back arched, and feet spread apart. Pain is shown in lying down, with a refusal to rise unless forced. The joints frequently give rise to a