THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

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SETTLEMENT OF DRAINAGE DIFFICULTIES PROPOSED.

Good service in the drainage propaganda throughout Ontario is being rendered by the Physics Department of the Ontario Agricultural College, Guelph, by personally laying out farmdrainage systems and giving directions with regard to construction. Prof. W. H. Day, who has this work in charge, contributes a timely article to this issue of "The Farmer's Advocate" on the perennial subject of drainage disputes, which have no doubt been the occasion of as many and probably more costly and heart-burning litigation than the proverbial line fence. Prof. Day entitles his article, "Co-operation in Drainage," as indicative of the policy to be pursued that would result in more practicable and amicable plans and settlements than calling in professional engineers and going to law, usually a never-ending and costly process. As a rule, township councils have civil engineers (when available) appointed as official referees, in case the parties concerned in these drainage embroglios cannot arrive at an agreement among themselves, but we are under the impression, from cases which have come under our observation, that these men, unfortunately, have frequently given little or no special study to farm-drainage problems, their title of "Civil Engineer" being no guarantee that the advice given will be that of an expert. As a matter of fact, it is liable to turn out that of a novice, interested only to the extent of his fees. Now, since the O. A. C. Department of Physics has been making itself useful in planning and laying out farm-drainage systems, why not, with the accumulated experience and technical information gained, go a step further, and, where several parties are affected, thuse weakening these and lowering the concerned in a proposed draw and unable to decide upon the best plan and the proportion of costs to be borne, agree upon . Department to have a survey ment based upon its results.

Department would assume such a disinterested service, we are not in a position to say authoritatively, but entertain the conviction that Prof. Wm. H. Day and his staff, having the requisite experience and knowledge and the interests of the farming community at heart, a much more economical and efficient service would be rendered than frequently occurs under the present system. Being public servants in an agricultural institution, the outlay involved would simply be the matter of travelling expenses; so that, providing they are willing to assume such pacific and practical duties, the one consideration to be disposed of would be the time involved from the regular work of the Agricultural College. There appears to be ample scope from time to time in many localities for such an intermediary mission, and we are satisfied that our proposal is one deserving of a

HORSES.

A CLASS FOR GRAYS.

Considering the paucity of gray horses in the Thoroughbred and the higher-class harness ranks, it is interesting to note a class specially for grays at the International Horse Show in London. There was a time when it was a proverb that, day or night, no one could cross London Bridge without meeting a gray horse. It is generally believed-on statistics-that gray horses were much more stout and healthy than any other color. The grays came originally from Cappadocia and Persia, which stock is still found in the magnificent heavy cavalry of the Russians. The grays, says the Sports of the Times, went for weddings, as the magnificent black Andalusians went for funerals. Yorkshire is the strong gray section of England; the "Tykes" breed to color extensively. Orville, rest his glorious memory, was foaled in the famous West Riding of Yorkshire. He won the great St. Leger, sired Emilius, Ebor, Muley, and others. Browns come from the East Riding, with white locks at the tail, the sign-manual of Woodpecker in the third, fourth and fifth genera-In South Yorkshire reign the chestnuts, representing that magnificent horse Comus, side by side with the rich brown of Tinker, by Tramp. Breeding to "original" color was held in Persia, Russia, and later in England, from the birth of the Pyramids to the end of the sixteenth century, when breeding to type, speed, etc., came in, and the old "color" scheme faded, changed and developed into the present bay, chestnut and brown, leaving scarcely a trace of the primary black and white-if, indeed, black is a "color.

HALTER - BREAKING.

Horses are not naturally vicious, and, with proper attention in colthood, bad habits would The habits can generally be never be formed. broken by intelligent management. A very troublesome habit is that of halter-breaking. Once a horse finds he can break the halter, he is everlastingly at it. To cure the habit is not nearly so easy as to keep the horse from learning it. However, two tried remedies for halter-breakers, suggested by an exchange, are herein given: Horses that are inclined to pull and break their halters when fastened in the stall have often cured in the following way: Two straps are lightly attached to a rope which passes through a ring fastened in the end of the halter strap. halter strap passes through a ring in the stall. If a horse endeavors to go backward suddenly, he finds that the harder he pulls the greater is the tendency to draw his fore legs from under him. A few attempts will cure even the worst halterpuller. Another simple and effective method is worked out by the use of a long rope. One end of the rope is first fastened to the manger. rope is then threaded through the lower ring in the halter, back between the front legs, then over the back and down under the belly, between the front legs again and up through the ring to the other end, and then tied to the halter. halter-breaker will soon find a surprise in store for him when he leans back against the rope, as the pull comes on his own back instead of on the rope

For many diseases to which horseflesh is heir, an acre of grass paddock is better than all the drugs in the Pharmacopæia. Grass cures ailments without creating others. Drugs cure, very often, by stimulating or taxing other organs than those general vitality. Grass is the great physic, the great tonic, the natural medicine, and free exercise on Nature's carpet will do more for the maority of foot and limb troubles than the average veterinary surgeon, and is much cheaper. parians have a place, but so has the field.

LAMENESS IN HORSES.

Lameness may be defined as an expression of pain in one or more limbs, the act of $\operatorname{progress}_{\operatorname{ron}}$ not, in all cases, being necessary to the manifestation of such, as a horse may stand lame.

Diagnosis of Lameness.-In many cases the seat of lameness is evident, while in others, even though the lameness be well marked, it is difficult. and requires care and knowledge to locate it. While we do not think it wise for an amateur to attempt to diagnose and treat a case of $_{\rm more\ or}$ procurable, it may be interesting, and to those who are not within a reasonable distance of a veterinarian, instructive, to deal briefly with the peculiarities of gait shown according to the part affected. The first point to be determined is the limb in which the animal is lame. This may seem an easy matter, but in reality is attended, in many cases, with no little difficulty, especially to those who have not given lameness especial study. It may be mentioned that a horse lame in one fore leg or foot will step as lightly as possible with the lame foot, lift it from the ground quickly, and tread heavily with the sound foot, his head nodding at the same time; that is, his head nods, more or less, according to the severity of the lameness, as the sound foot touches the ground. When lame in a hind leg, the elevation and depression of the hip of the lame leg will be more marked than that of the sound one. In some cases a mistake may be made by expressing an opinion that the lameness is in the hind leg when in reality it is in the fore, and vice versa. This mistake has so often been made that the peculiarity of gait that has led to it has been called "cross lameness." For example, a horse lame in the off fore leg is trotted from the observer; he seems to be lame in the near hind, for the quarter seems to ascend and descend. when the animal is trotted towards the observer, it will be seen that the irregular motion of the hind quarters depends upon the elevation and dropping of the head and body, and that the lameness is really in the fore and not the hind An opinion should not be given until the horse has been trotted from and towards the observer. Of course, there are many cases of lameness where the seat is so apparent that such an examination is quite unnecessary. In testing a horse for lameness, it is well to select a hard, smooth road and have the horse led with a loose rein, first walking and then trotting, both straight away from and straight back to the observer. A horse may walk sound and go sound when trotted fast, or excited, or with his head held up by the person leading him, and show lameness when allowed to jog with a free head. When a horse is lame in both fore feet, some

difficulty is often experienced in its detection, as to the inexperienced he may appear to go sound. He will not nod in his gait, but will be short in his action; is said to go "groggy." Each foot is carefully put to the ground and quickly lifted up again; the step is short, and there is a rolling motion of the body. In other cases he may exhibit lameness in one foot as he goes from, and in the other as he approaches the observer. Such cases are very confusing, and require considerable power of discrimination. Care must be taken not to confound peculiarity of gait with lameness. For example, a horse, especially a young one, may appear lame in the fore foot if led with a short rein and his head pulled to one side, or when first bitted. This is called "bridle lameand disappears when the animal is run in a slack rein. Again, horses which are habitually exercised in a ring or round a circle usually appear lame in the fore limb nearest the center of the circle. When an animal is lame in both hind limbs, the difficulty of diagnosis is not so great, as he is both stiff and lame; but mere stiffness should be distinguished from lameness, although the two are often confounded. A stiff horse is certainly unsound, but may be very useful for slow work. Mere stiffness is not accompanied by pain; it may indicate fatigue in old age and pass off with exercise, or it may be constant, and, while the animal is discommoded more or less thereby, he does not suffer pain. But lameness is indication of actual pain or disease, and although it may disappear with exercise, it must not be confounded with stiffness. There are some forms of lameness which are apparent in the stable only, the movements caused by bringing the patient out of the stable being sufficient to cause the total disappearance of the lameness. Hence, the examiner should see a horse in the stable as well as out of it. WHIP

PROUD OF IT.

I have much pleasure in forwarding amount of my subscription to "The Farmer's Advocate," publication of which, in my opinion, the Dominion has reason to be proud. ALEX. McNEILL. Grey Co., Ont.