

Where it is necessary to have small drains across a road, never cover them with pickets if flag stones can be procured within two miles; but if pickets must be used let them be first covered with coarse boughs and then with not less than eight inches of earth to prevent them from rising with the frost. There are some (otherwise) good roads, which disgrace their makers by having every half mile a lump of pickets placed across them which give such strenuous jolts that they sometimes break the axletrees of loaded carriages. Besides being extremely unpleasant to all who are riding in carriages of any kind. These drains are generally made too small; should be remembered that there are some extraordinary floods. To break a large blue whinstone dig a narrow hole beside it nearly to its bottom; a fire may then be kept in this ditch without a great quantity of fuel which will soon shiver the stone. This should always be given to an idle noisy man if there should be such a one in the party, because you can in this way keep him where he will not delay better men, by his talking.

The most work is done when the men are divided into small parties, but there should always be one smart active man in each party.

It is always best for the overseer, before he commences his work, to go over the roads to see where the labour will be most skillfully applied, and also to look out for the proper places to procure materials, especially gravelly soil for covering, which is more readily obtained by digging into it a little, than by only inspecting the surface.

Should the overseer have among his neighbours a bustling, ambitious man, always ready to oppose and quarrel with everything which he is not the manager, he would generally act wisely to invite that person to walk with him over the roads, and assist him in planning his work: Besides receiving some useful information from him, he would generally find that, in this case, his wrangling neighbour would almost certainly approve of all his plans, and be the most active person in carrying them into effect.

BROKEN-WINDED HORSES.

Broken wind is by far the most frequent among the hardy round-ribbed horses that are "ribbed lame,"—that is to say, those that have the hindmost rib very close to the hip bone. This is manifestly a hereditary complaint, and neither horse or mare that is broken-winded ought to be used for breeders. They most frequently lose their wind about the time they are completely grown, not far from eight years old. The peculiar cough that precedes this disease may often be perceived at five years old, when it will occasionally suddenly attack them, and as suddenly cease. Upon seeing horses that were broken-winded, a part of the air vesicles of the lungs have been found ruptured, and in some cases a portion of the midriff very thin, and stretched beyond its proper size. As these horses, if otherwise strong and healthy, which is often the case, continue while they live to mend in their wind, although they never completely recover, it has been supposed that the liver and lungs increase in size after this accident so as to give nearly as much support to the heart and lungs as they had when the midriff was ruptured—it having been found that the liver of a horse which had been affected with this complaint, was frequently nearly double the usual size.

Broken wind may be distinguished from thick wind by the nature of the breathing. In thick wind the breathing is rapid and laborious, the drawing in the breath and breathing it out are equally so, and occupy precisely the same time. In broken wind the breath is drawn in by one effort; it is breathed out by two, occupying about the time.

This disease cannot be completely cured, but by proper treatment it may be palliated so far as to make the horse useful,—and there is reason to think that it may be prevented, in many cases, by the same management. The horses most exposed to it are those descended from a broken-winded horse or mare, and among these, those which live mostly on hay or grass, with very little grain. The bulk of the horse's food should be diminished,—he should have less hay and more oats, with a mash of scalded bran occasionally, where nothing more suitable can be procured; but carrots are better, perhaps, than any other moist food in this case. He should be allowed to eat and drink a small quantity often, but should not be allowed to drink as much as he pleases till night, when his work is done, his largest feed of grain should also be given at night. He should not be allowed to feed upon rank after-grass late in the season, when it has been exposed to considerable frost,—and, which is of most importance, he should, if possible, be constantly employed at moderate work, for allowing him to remain idle for a considerable time always increases the difficulty of breathing; but broken-winded horses, when constantly employed as draught horses, are often as useful as ever they were.

STRANGLES.

This is a swelling in the channel under the jaws, which suppurates, and breaks, discharging a considerable quantity of matter, when it quickly heals, and the horse is never again affected with it. It is believed by many in England not to be contagious, but it may be observed that it was for a long time unknown near Halifax, and that when it appeared it spread rapidly among the horses, proving a very infectious disease. It destroyed a considerable number, the mortality being undoubtedly much increased by the remedies used by the owners, to most of whom the disease was wholly unknown.

In a number of cases the swelling appeared just below the ears on each side, and never suppurated. When nothing was done in this case, these swellings slowly disappeared, but in several cases not till the horse's flesh and strength were considerably reduced. When the swellings were removed by applying vitriol, alum, goulard water, &c., the horse lost his appetite and wasted away, the hair falling off in many places before he died.

In some fatal cases the swelling commenced on the breast, or foot, forming ulcers which discharged a pasty matter, but never healed,—and a small number, who had been exposed to the contagion, were attacked with a kind of atrophy, losing their flesh, strength and appetite without ever having any external swelling, appearing exactly like those that had their swellings removed by repellent medicines. One horse in this state, and another who had lost his appetite, strength and part of his hair, in consequence of having swellings under the ears scattered by repellents, as they are called, were cured by giving them a heaped teaspoonful of antimony, the same quantity of powdered gum guaiacum, and a large spoonful of flour of sulphur daily.

When the swelling appears in its usual situation, under the jaws, it generally does well if let alone; but in a few instances it has produced suffocation. The horse will be very thirsty, and should have water held up to his head very frequently, for he cannot swallow with his nose held low,—nor will he, though thirsty, drink much at a time, as swallowing gives him great pain. A little bran and oatmeal should be given him, and, when grass cannot be procured, a little chaff made by cutting hay very short, may be mixed with half the quantity of bruised oats, or one fourth of oatmeal, and scalded with boiling water. Of this they will generally take a little, and they do not appear to have an appetite for much food