The animal must drink plentifully of a decoction of linseed, or marsh-mallow root, or of gum arabic; if the patient refuses to take those mucilaginous decoctions, he must be drenched with the horn. Nothing but a little hay should be allowed him, and plenty of scalded bran three times a day. If any medicine is required, give the following:

Take spirits of etheris nitri, four ounces; tincture opii, half an ounce; mucilaginous decoction of linseed, or marsh-mallows, two quarts; mix it well, and give the whole with the horn in the usual manner. By following this treatment, every case of this kind may be cured without further trouble.

ECCHYMOSIS

Is an effusion of fluids from their respective vessels, under the integuments, in consequence of hard pressure, or bruises; but more particularly after bleeding, either from the orifice in the skin, sliding over that in the vein, or from the vein being cut through.*

The cure consists in applying frequent fomentations of salt and water, and compresses of the same at night. If it tends to suppuration, treat

* For further instruction the reader will refer to the article of Bleeding.
it as an abscess, by applying a mild blister on the place; this I strongly recommend as the best remedy, to procure resolution, or to hasten the formation of pus.

But in case of recent ecchymosis I strongly recommend to evacuate the blood, by as many scarifications as may be requisite for that purpose; and treat as above, with the fomentations of salt and water, vinegar, and spirits of wine, or camphorated spirit and soap.

**EMPHYSEMA**

Is a disease that so seldom happens to horses, or any other animals, that I was much inclined to omit it. But as it sometimes takes place, particularly in some epidemic disorders, it therefore becomes necessary to say a few words on the subject.

Emphysema is a flatulent tumour, arising from air being admitted into the cellular membrane; in a similar manner as butchers do, when they blow air between the skin of sheep and calves, &c. by means of a pair of bellows. Pneumatosis is the general name for this disease, the swelling formed by air, or else flatus, or rarified fluids.

The most frequent causes of this disorder, are
wounds in the lungs,* putridity, as is seen in mortifications of the external parts, and in many instances of putrid and contagious disorders. In this case putridity raises the air from a fixed to an elastic state.

An emphysema is a puffy swelling, which gives way on pressure, but that removed, it instantly returns. A crackling is perceived on stroking the emphysematous part.

When the lungs are wounded, a troublesome cough attends; the air escapes from the lungs into the cavity of the breast, and not being discharged outwardly, through the pleura, it occasions great difficulty of breathing, with every appearance of instant suffocation, and if relief is not speedily obtained, the animal soon dies. The air confined in any part of the cellular membrane may produce a mortification there; as it will be remarked in the contagious disorders of horned cattle.

For the cure of this disease, without any regard to whatever may be the cause, the only remedy for brute animals, is to scarify, with a large fleam, as deep as the part will admit. The

* Wounds in the lungs may produce an emphysema in the human subject, but in brute animals, when the lungs are wounded, as it frequently happens in horses, an empyema, or an accumulation of water in the chest, oftener takes place than an emphysema, although I have seen one or two instances of both existing at a time in horses in consequence of wounded lungs.
air will be evacuated by a gentle pressure on the tumour; when the air is all out, the part must be well fomented with vinegar, spirits of wine, or brandy.

When these tumours happen in putrid and contagious disorders after the scarifications as before-mentioned, the part must be blistered, in order to bring the scarified parts to suppuration: but when a wound is the cause, if the breathing is quick and laborious, we must bleed, and repeat the operation as often as the symptoms render it necessary.

When the air is detained in the cavity of the breast, it may be discharged by a small opening, made so as to form a valve of the teguments, or skin; a knife should be used for this. But afterwards the air must be evacuated by introducing a trocar into the thorax, taking care to avoid wounding the pericardium; the instrument being introduced into the chest, the tube must be left in the orifice, to give a free passage to the air.

**EMPHYSEMA**

Is a collection of purulent matter, lying loose in the cavity of the breast. But the matter may be water, or a mixture of water and blood, coagulated lymph, or pus; but as to the kind
of matter, it can only be known by the nature of the disorder which preceded its accumulation.

This accident happens in horses, nine times out of ten, after the recovery of an inflammation of the lungs, in consequence of a collection of coagulated lymph, frequently left in the cavity of the chest unabsorbed, which is often found after the animal’s death, to the quantity of four or five gallons.

Wounds in the breast, large and deep seated abscesses in front of the chest, may also evacuate their matter into its cavity, and prove a cause of this disease, by making their way into the thorax; but this case generally produces instant death.

When any fluid or matter is collected, and remains unabsorbed in the cavity of the chest, after an inflammation of the lungs, it is known by the following symptoms: the breathing is short and laborious, and on the least exertion, the animal is in danger of being suffocated, by a dry cough, which is extremely painful; if the horse lies down, he cannot remain long in that situation, in consequence of water pressing upon the lungs, and increasing great difficulty of breathing; these symptoms are always attended with a depraved appetite, preferring litter or dung, to hay.
The cure of empyema is performed in the human subject by an operation, but it has been seldom attempted in horses; although I have not the least doubt but that it may be done with success, if it were attempted before mortification takes place.

But this fatal progress is so rapid in horses, that it leaves us but very little chance of performing the operation of empyema upon them, with any appearance of success; yet, if it is attempted, it may be done as follows, viz.

Before we begin the operation, we must have a person employed to pull the skin sideways, and preserve it firmly in that situation during the operation; this caution is intended to strap up, or cover the cut, after the water has been evacuated, and prevent the admission of air in the chest.

Then, with a scapel, make an incision of about two inches in length, between the 6th and 7th ribs, in the direction of these bones, and at an equal distance, between the sternum and back-bone, taking care to avoid the under border of the superior rib, on account of the blood vessels running in its groove. It is not necessary, that the incision to the bottom should be of the same extent as that in the skin, and cellular substance.

The pleura being laid bare, divide it slowly. 
and cautiously, to avoid wounding the lungs, if there should happen to be an adhesion. If they do not adhere, the water will rush out in great force immediately, on a small hole being made in the pleura. Should there be an adhesion, the incision may be either continued, upwards or downward, or an opening made in another place. As soon as the water flows, a canula, with a pierced body, should be introduced at the opening. If it is not found prudent to evacuate all the water at one time, secure the canula with tape round the body, and apply a piece of cork to the opening. Thus, after two or three days, an additional quantity of water may be drawn off. After this, the skin must be drawn over the wound, and, by compresses of tow one over the other, and a proper bandage round the body, the parts will unite without further trouble.

If blood, or coagulated lymph, is so thick as not to pass off by the perforation, in this case the opening of the pleura should be enlarged. If this does not answer inject warm water into the chest, with caution; it may be necessary to repeat the injections of warm water more than once, in order to soften and dissolve the hard lumps of coagulated lymph or blood, if the disease happens from a wound in the chest, or inflammation of the lungs.
EPILEPSY.

I have very great doubts about the existence of this disease in horses, or in any other quadrupeds, (the dog excepted); because, I sincerely declare, that during a great many years practice and observation, and that, in the different parts of the world, I have never been able to find any peculiar epileptic symptoms in horses, except those which are attached to the staggers, apoplexy, and inflammations of the lungs, fevers, and other inflammatory complaints.

Yet we read in all farriery books some long and imaginary descriptions of epilepsy, which terminate by recurring exactly to the same treatment recommended in their articles, under the heads staggers and apoplexy, &c. Therefore, the symptoms, prognostics, and treatment of epilepsy, being the same, we refer the reader to those articles, in which they will find every information with respect to epilepsy.
ERYSIEPELAS

Is a disease of very little consequence in horses and other animals, if care is taken in proper time; but when the case has been neglected, or improperly treated, an Erysipelas will sometimes degenerate into some troublesome distemper.

This disease begins by a number of small lumps appearing on the skin, without the animal shewing any symptoms of other illness; his appetite continues good, and every secretion, of dung, urine, and perspiration, are regular; when those lumps are numerous, the skin becomes stiff. A burning heat is felt in the part affected. This disorder often shifts its situation, and it is not uncommon to see it retire suddenly, and return a few days after in a most confirmed farcy. But, if instead of re-appearing on the surface of the skin, the humour is thrown upon the brain, it will produce the staggers. If the lungs or bowels are affected, those viscera become inflamed; in the lungs, a cough and inflammation of the vices will take place; when the bowels are attacked, a cholic or gripes will follow: either of these cases may carry the animal off in a very short time.
The erysipelas should be distinguished from farcy, and the mange, &c. and it is to be observed, that the first may be cured infinitely easier than the two last; however, they all proceed from sudden change of temperature; as, when horses are exposed to sudden cold and heat, or to cold and wet, in a state of perspiration; or when the animal being young, and full of blood, is in want of a proper regular exercise; but chiefly from sudden cold succeeding a great heat or sweat, obstructed perspiration, and a sharp and acrid state of the blood.

In order to perform a cure, the first endeavour should be to remove this disorder by solution. In the first place, we must bleed pretty largely, and repeat it if the case requires; then purging physic, and to perform a permanent cure, a diuretic must be given, one after another, during two or three weeks.

When an erysipelas has been neglected, the body becomes often covered with small pustules, filled with coagulated lymph, resembling little worms, when pressed out of the skin; in this case, every one of those lumps must be opened with the point of a lancet, or fleam; then apply the actual cautery, and a blister on those that appear large and flat, having no fluids in them; it is sometimes necessary to use the actual
cautery and blister more than once. If the disease has made still farther progress, the reader will find the treatment fully described in the article Farcy.

EXERCISE.

Exercise is an article of so much importance to the animal economy, that it often becomes a very good remedy to cure, as well as to prevent many diseases in horses. It therefore becomes necessary to say a few words on the subject. Every one knows that exercise is good for health; yet it must be allowed, that a great many are totally ignorant of the mischief which is done by a violent and immoderate use of it.

Horses are intended for labour and activity, and if exercise is wanting, the stomach and bowels become inactive, the food cannot be properly digested, hence indigestion and costiveness ensues; the intestines in this loaded state, will undoubtedly obstruct the circulation, particularly in the liver, spleen, and mesentery; and when this is the case, diseases are unavoidable; they make their first appearance in the system by glandular obstructions in different organs of the body; the sheath, and legs begin to swell, and crack, which often produces
the grease, coughs, inflammation of the eyes, and lungs, and even glanders. These are, in general, the baneful effects resulting from want of proper and regular exercise, and of keeping horses in an impure heat, occasioned by the breath of animals, many times respired; and by the fermentation produced by dung and urine, various diseases will frequently be the consequence.

It is moreover well known, that without exercise sufficient to excite moisture on the skin, the coat will never be fine, or free from dirt. The filth extracted from the hair of the horse, is not all collected from the stables, but in part secreted by the vessels of the skin, and without the aid of perspiration, scarcely any grooming is sufficient to remove the whole of this extraneous matter; under these circumstances it is almost impossible for a horse, while at rest, to appear in condition, and healthy.

From what has been said, it may be inferred, however, that horses should be accustomed to exercise by degrees, not to give them a day's hard work, and then let them rest a week at a time, such irregularity proves more hurtful than beneficial; therefore, this circumstance ought to be taken into the utmost consideration. Their exercise should be continued, in proportion to their strength, manner of feeding, and
the work they are intended for, &c. and this should not only be repeated every day, but increased as circumstances may require. From not attending to this precaution, many broken winded, and other asthmatic complaints, have occurred.

Fat horses require a long course of very moderate and regular exercise, before they can be brought to any violent exertions. The want of attention to this circumstance also has often been the cause of sudden death.

The effect it produces when exercise is carried to excess, is evident enough in hunting and racing, where the circulation of the blood has been pushed so violently, in every part of the body, but more particularly so in the lungs, as to have produced immediate suffocation: we have many examples of this kind, when the exertions have been carried beyond the limits of the vital power.

Such accident will happen also in consequence of putting hunters, or racers, and even road horses, on such exertions, previous to their being properly prepared for it.

But one of the greatest sources of disease in horses, is that intolerable practice of exposing a horse to the cold air uncovered, tied at the stable-door, and allowing him to drink his belly full of cold water but what is still worse, is that
Exercise.

cruel method of taking him into a pond of water in a profuse state of perspiration. Horses so treated, are frequently seized with the most violent and acute diseases of the intestines, kidneys, and lungs, &c. and if they survive the inflammation produced by either of these complaints, they will most likely labour under the obstinate chronic diseases of the chest, attended with dreadful coughs, swelled legs, inflammation of the sensible sole and laminae; either of which cases may render the animal totally unfit for speed or any other use.

Having represented the good and bad effects, resulting from too little or too much exercise, nothing more remains to be said on the subject, than that a constant and moderate use of it will increase the muscular power; it will assist to promote a free circulation through every part of the body; it will create an appetite, and promote digestion; and every secretion will be regular; it invigorates the system very much, and occasions a great flow of animal spirits to the animal machine, which never can possibly exist, without a due and well proportionate exercise.