When a horse cuts his heels with the toes of his hind shoes, and the part is torn or bruised, it requires to be properly dressed, with warm bathing, poultices of boiled turnips and bran; if any sinus appears, the hoof must be pared away, and the sores dressed with common digestive ointment for a few days, binding all on with a compress and roller.

For further instructions, we refer the reader to the article Bruise.

PALSY.

In the human subject palsies and apoplexies are considered as different degrees of the same distemper, only, the first consisting in a rapid weakness in some of the muscles of voluntary motion, and the last in a total loss of motion in every part of the body, except the heart and organs of respiration, together with insensibility; the cause of which is sometimes so great as to occasion instant death. The loss of the power of moving one limb, or one half of the body, is the obvious and striking character of palsy. But in the horse I have never been able to see a single case of palsy, during a long and immense practice of thirty-six years, except those symptoms observed in the articles stagger and apoplexy; yet we read in several farriery
books, some long and erroneous chapters on this complaint, which afterwards terminated, by prescribing the same treatment recommended in the articles apoplexy and staggers. For my own part, I sincerely declare the existence of palsy, in the horse and other animals, to be entirely imaginary (the dog excepted). Therefore I think that the description of such a disorder, as well as many others, is utterly useless, and should be expunged from modern veterinary works, for having no other purposes than to mislead young and inexperienced men.

For the causes and treatment of palsy, the reader will refer to the article staggers, in which it will be found fully described.

**PARTURITION, or DELIVERY.**

*Nature,* for the most part, is competent to the act of parturition in animals; yet it sometimes happens that manual assistance is required. It therefore behoves the veterinarian to be well acquainted with the minuta of the parts of generation: to know, for instance, first, the parts of the pelvis in the different species of large cattle, its dimensions, the depth of its cavity, &c.: second, the parts subservient to generation: third, the structure of the womb, and its neck, and its state in the different periods of
gestation: fourth, the progress of the young animal through the different parts of the pelvis in a natural labour: fifth, the management of the secundines: sixth, the difference between false and true labour pains: seventh, the different kinds of labour: eighth, the various modes of the foetus presenting, with the methods of delivery: ninth, the different consequences of parturition.

The natural position of the colt or calf is, when it presents the forefeet, the nose between the feet, and the back upwards. In the false parturition their appearance is various: first, the tail appears instead of the head: second, the fore feet and no head: third, sideways, the belly being upwards, the head reversed over the shoulder, and the legs appearing: fourth, the fore feet, with the head under the breast: fifth, the head, either alone, or with one foreleg only: sixth, the head and one leg, or the head alone: seventh, lying on its back, its four legs folded nearly together and close up to the spine, the head appearing, or doubled back even with the ribs, on either side; one hind leg perhaps presenting.

In all these cases, timely assistance must be given to the animal before her strength be exhausted, never attempting extraction but in a proper position.
PARTURITION.

The operator should supple his hand and arm with warm water and fresh butter, or lard, or olive oil; examination is best made when the cow, or mare, is standing, and in the intervals of the labour pains. In pulling at the feet, it is better to inclose them in the hand, that they may not bruise the cow or mare in passing along. Should the navel-string burst, and produce effusion, it is by no means an alarming case, and will give you plenty of time to tie it up. Instruments should be used only in the last extremity, and only by experienced operators. The best method, in many instances, is to tie a rope to the two fore legs, and let two or three men pull it at every pain or natural exertion, taking care to keep the two fore feet and head in a proper position.

The hook, by which to assist in extracting the fetus, should be of iron, and four inches long, with a loop for a cord at the straight end.

In the preternatural position, no attempt should be made to turn the colt (this position being favourable for extraction); but expedition should be used, for fear of its being suffocated. Press the haunches back with the palm of the hand, take hold of the bend of the hock of one leg, pull it, and reach the foot; both feet may thus be brought forth.

No. 2. Reduce the head to its proper situa-
tion between the fore legs, either by laying hold of the nose or jaw-bone. A long arm is needful, which must be kept to the body, that instant advantage may be taken of every labour pain, by having the fingers properly fixed.

No. 3. Gently move the calf back, and bring the head forth to the legs.

No. 4. Push the colt or calf back, to find the head; pull at the nose: this requires a skilful person; but it is useless to employ force until the head be in its proper place.

No. 5, and 6. Push the calf back against the shoulders and breast, the feet will be found folded under the belly; bring them forward, one at a time, placing the hand gently on the bend of the knee. Should the head be too much swelled and bruised to be returned, it must be skinned and amputated. Dissect, in a straight line, from the pole to the nose; force the skin back over the first joint of the neck; divide the head from the body, pushing the latter back to obtain hold of the knee. The loose skin must be previously wrapped over the ragged bone, and an assistant should have fast hold, in order to guide it clear to the haunch bone of the cow; should it hitch there, put it back instantly.

No. 7. If one hind leg appears, put it back: the colt or calf cannot be brought with a hind
and a fore leg together; and the difference between the knee and hock will be immediately discovered. The head being doubled back, must of course be reduced to its proper place. The mare or cow being strong and quiet, the business may be effected with care and patience; but should the hook be positively necessary, hold must be taken, either in the sockets of the eyes, cavity of the ears, or in the jaw. Keep steady until fair hold can be taken. In cases of difficulty, occasioned by dropsy in the colt or calf, which will be sufficiently apparent from its preternatural size, we must pierce open the belly of the calf with a small knife, by which means the delivery may afterwards be effected.

Besides these difficulties, there is sometimes an other attending the expulsion of the placenta; which, in cows, sheep, and other animals, is usually left to the efforts of nature alone. But it frequently happens, that nature alone, without the help of art, becomes inadequate to the task. From some cause or other, as from taking cold after calving, or from hard delivery, this fleshy mass will remain in the uterus for a considerable time, and acquire there a putrid quality, which will destroy the animal, if a proper method is not used to remove it.

When it is not in our power to do it by manual operation, we must trust to the operations
of medicines. The best of which is, to boil an ounce of cinnamon and one nutmeg powdered in a quart of boiling water for a few minutes, then add half a bottle of wine, with two drachms of ginger in powder; give the whole with a horn. The same dose may be repeated twice a day, with a warm stable, and warm clothing.

But I repeat again, that the expulsion of the placenta (or after-birth, as it is called, should never be delayed of being performed immediately after the young animal is brought into the world, taking care to seize every opportunity to pull at every labour pain, and employing as much force as the fetus seems to weigh; that is to say, pull twelve pounds, if the young weigh as much, and so on accordingly.

PERIPNEUMONY,
OR INFLAMMATION OF THE LUNGS,

Is a common, and one of the most dangerous disorders that can happen to a horse; inasmuch, that if nothing has been done in this malady, it is hardly possible to save his life after three days have elapsed. The disorder once excited, various effects will be produced, according to the diversity of the parts affected: for inflammation of the lungs inflames the contiguous extremities of the pulmonary ar-
tery. When these are inflamed, the blood becomes stagnant, the vessels are distended, the thinnest part of the fluids is expressed, as it were by transudation, and the thicker parts are accumulated; and all the blood, as yet capable of circulation, is collected between the right ventricle of the heart, and the extremities of the pulmonary arteries. Hence the lungs become oppressed, incapable of expanding; and, after death, the right ventricle of the heart is found to have been inflamed; and on some occasions so much distended with blood, as actually to burst, and the lungs resemble putrid liver, the cells being filled with blood from the great distension of the pulmonary arteries. This effusion takes place in the cavity of the chest, often to the quantity of one and two buckets. In the beginning of the disease the pulse is oppressed, from the great distension occasioned by the blood in the right side of the heart, while the left side of this viscus is weak, for want of a sufficient quantity. In the horse peripneumony, pulmony, pleurisy, &c. form only one and the same disease; although some of our latest veterinary writers have been pleased to make different chapters of each, after admitting the almost indistinguishable resemblance of the different diseases, and the necessity of recurring to the same treatment for them all.

The Causes of this disease, are a sudden
change of temperature in the atmosphere; the drinking of cold water, after being heated by exercise; or by exposure to a current of cold or damp air in the same state; swimming or washing the animal in a state of perspiration; high feeding, and want of regular exercise; and lastly, that blind notion of keeping the stables too hot; for nothing contributes so much to the generation of diseases of all kinds, as shutting up horses in warm and confined stables, where every door and window, and every crevice of the stable is closed up (as if the external air was infectious); by which means they constantly breathe a loathsome, strong, hot, foul air, highly impregnated with the putrid steams of their own urine, dung, &c. and every hurtful exhalation produced by the great heat of the confined air. Such a situation as this unavoidably brings the system into a completely relaxed state: the lungs being deprived of a free circulation, the animals are exposed to all kinds of distempers, which take place in consequence of obstructed perspiration; such as tumours in the glands, lumps, swelled legs, the grease, mange, farcy, inflammation of the eyes, and even the glanders. But the danger is infinitely greater when the perspirable matter, intended to be carried off in the ordinary course, fixes itself upon some internal viscus, such as the brain, the lungs, pleura, in-
testines, &c. From the first arise all the diseases of the brain, such as staggers, apoplexy, &c. From the second, coughs, inflammation of the lungs, consumption, &c. And in the third place, should the perspirable matter fix upon the bowels, a diarrhoea will be the consequence, which generally terminates with more or less fatal effect.

The danger of an inflammation of the lungs is in proportion to the degree of fever, which may easily be ascertained by the following invariable symptoms, viz.: quick respiration; hot breath; the extremities cold; the tongue hot and dry; the flanks heaving; the animal never lying down; the last forms a very characteristic symptom: he also sometimes hangs his head.

Treatment.—The most powerful means of resolution should be employed on the discovery of the disease; copious bleeding from a large orifice, or from opening the two jugular veins at once, is what we chiefly depend upon. In this operation the quantity of five quarts may be taken at once, which answers better than the common practice of drawing three pints, or two quarts, as practised by common farriers. Previous to bleeding, the pulse is oppressed; but it soon becomes strong and full, by the removal of the distension, by copious bleed-
ing; but, if the evacuation be continued, it becomes weak.

We must endeavour also to bring on external irritation on each side of the chest and legs, by blistering or firing (or perhaps both) the region of the lungs; and at the same time introducing one rowel under the chest, and another under the belly. The four extremities are to be well stimulated with spirits of turpentine, twice a-day; if this does not stop the progress of inflammation, we must stop the circulation in the veins by external compression (or ligatures); and at the same time the cellular membrane, under the skin of the chest, must be inflated with air, so as to bring on inflammation; and if this does not succeed, we may inject some stimulating fluid, as spirits of turpentine, which is the best stimulus; this will be found one of the most salutary remedies in this fatal disease.

Internally, diuretics are sometimes used with advantage; such as an ounce or two of nitre made up into a ball, with a little treacle; at the same time giving the following balls, viz. tartar emetic, three ounces; opium, an ounce; camphor, twelve drachms; calomel, an ounce; treacle, sufficient quantity to be made into a mass; to be divided into twelve balls, one of which must be given in the morning, and another in the evening.
During this treatment we must inject two or three clysters of warm water every day; and the animal must also be kept in a cold stable, well clothed, taking care to allow a free circulation of air; in dry weather, indeed, an open field will be preferable to a stable. His drink must be of good warm gruel; and the animal must take no exercise during the inflammatory state of the disease. On the termination of inflammation of the lungs, a quantity of coagulated lymph is frequently left unabsorbed in the cavity of the chest; or a common anasarca of the lungs occurs from the inaction of the absorbent vessels, which had previously been excited too violently. This produces a cough, and a difficulty of breathing, which is sometimes cured by the use of a very powerful tonic; such as blue vitriol, and tartar emetic, of each three ounces, mixed with a small quantity of linseed powdered, and anisated balsam of sulphur, or Venice turpentine, sufficient quantity to mix the mass, to be divided into twenty-four balls, given once or twice every day, according to circumstances, and continued as long as necessity requires. Should they act as a diuretic, or take the horse off his food, they must be discontinued for a few days; but when the staling is over, and the animal recovers his appetite, the medi-
cines must be recurred to as before, until you have obtained a perfect and radical cure. Blistering on each side of the chest will also be found very useful in promoting absorption. If the method of practice here recommended be judiciously employed, it will answer the highest expectations, in removing the inflammatory as well as chronic state of one of the most fatal disorders incident to the horse.

PERSPIRATION.

Transpiration, or what is vulgarly termed sweat: any one that has a slight idea of animal economy, is pretty well convinced, I trust, that, without a free perspiration, a good state of health cannot be preserved.

Perspiration is divided into two classes; one is termed sensible, and the other insensible: the first being commonly called sweat, it has been supposed that different kinds of vessels were employed in animal economy to throw off these discharges; but we are now perfectly convinced, that the same vessels produce both insensible and sensible perspiration; all the cutaneous vessels opening on the surface of the skin, and forming the pore through which the matter of perspiration passes.

As perspiration is very liable to be suddenly checked by cold, whether arising from a
PLETHORA.

current of air, by water thrown upon the body, or by the animal being plunged into it, in all which cases this salutary and useful secretion is apt to be stopped, and occasions a variety of diseases, that can only be understood by those that are well acquainted with animal economy.

In the diseases produced by suppressed perspiration, the following circumstances are to be adverted to: first, the degree of cold applied; second, the longer or shorter period of its continuance; third, the greater or less susceptibility of the body exposed to it; fourth, the predisposition to the disease at the time; fifth, its partial or general application; sixth, its operation on the distant parts, by the medium of the nerves. The means of restoring proper secretion, are chiefly the application of warm clothing, or bathing, and the treatment employed in cold, fever, &c. to which the reader may refer.

PLETHORA

Is a word to signify that the blood vessels are too much loaded with fluids, either from a too great quantity, too thick, or a rarefaction of the blood, from whence fever, inflammation in different parts of the body, apoplexy, rupture of x 2
vessels, obstructed secretions, &c. may arise. If the blood contain too much serum, derop-
sical swelling will take place in the legs, belly, and other parts of the body, formerly called Water Farcy. When diseases are produced from too much blood, the arteries are incapable of producing a strong full pulse, until the obstruction, and a quantity of this fluid, is removed by bleeding. If plethora arise from too much serum, purging, diuretics, and frequent application of blisters, with gentle and continual exercise, will restore the blood, and other fluids of the body, to their natural state.

POISON.

In the last sixteen years of my practice, I have made various experiments on the effects of the different kinds of what is called poison. From the benefit I have received in such trials, I have been able to learn, that what is termed poisonous substances, have proved to be the most salutary remedies of the materia medica; and that their injuries to the system proceed from their having been improperly administered. I have tried very extensively all the substances that are reputed poisonous; as arsenic, corrosive sublimate, terra pounderasa, butter of
antimony, opium, blue and white vitriol, hemlock (night shade, or aconite), digitalis, or fox glove, nox vomica, &c. &c.

At different times I have given every one of these to horses with the greatest success, in many infectious and inveterate disorders, such as the mange, farcy, the glanders, and other chronic disorders of difficult management.

The mischief arising from them is always in consequence of their improper administration, by giving too large doses at once, either by mistake or ignorance, or with the intent of destroying life. When they have been thus imprudently or maliciously administered, it is certainly necessary to know what method can be taken to prevent the mischief that might ensue. But when this is the case, it is very often extremely difficult to succeed, nature having denied to the horse the salutary process of vomiting.

Poisons are of various kinds; and before any attempt is made to relieve, we ought to ascertain, if possible, what kind of poison the animal has taken; without this, little success is to be expected from any thing we can administer.

When arsenic, or sublimate corrosive has been given, if the accident is discovered in time, the poison may be rendered harmless, by
drenching the animal with water in which a quantity of alkali, (potash, soda, or salt of tartar) has been dissolved, taking care not to make the solution much sharper than a man can bear in his mouth. It may be made by dissolving an ounce of salt of tartar in eight ounces of water; the quantity to be given, to be regulated by the effects produced by the sublimate, from a pint to a pint and a half; however, may be given at once, and continued till the danger is over. The same treatment may be attempted when arsenic has been given, with the same appearance of success. In some instances oil, given in a large quantity, from a pint to a quart, has succeeded to eradicate the poisonous quality of arsenic and sublimate corrosive; and indeed it will be found very beneficial after the administration of the above medicines. Opium, and all the vegetable poisonous substances above mentioned, destroy life by a different effect than that of the mineral corrosive, for which, oil or a mucilaginous substance is a real specific, as the effects of those poisons seem to be to kill, by acting entirely on the nerves of the stomach. It is necessary to remind the reader that we consider poisons, with a view of preventing their fatal effects, when accidentally taken in too large quantities only. As to those poisons, which produce
their effects by admission into the blood, such as the bite of a mad dog, viper, &c. we refer to the article Hydrophobia.

POLLY-EVIL

Is nothing more than a common abscess, situated on the top of the head, running between the ligaments and bones of the neck and head, which, in a very short time, will form many sinuses. There, in consequence of being so deeply seated, matter cannot find vent at the surface by bursting the skin, like a common abscess, but spreads so much under the bones and ligaments of it, as to be shortly highly diseased, before suppuration shows itself externally. And if the matter is allowed to continue its ravages upon those parts, the ligamentum colli itself becomes affected, and the case often rendered incurable. This complicated ulcer and sinuses will show how little is to be expected from the frivolous and empirical applications of the generality of common horse doctors, who, not possessing an atom of anatomical knowledge, cannot expect their receipts to be adequate to the task of curing; the consequence is, that in such hands the animal often terminates his sufferings by being sent to the dog kennels. Poll-evil (as
it is called) generally proceeds from external injuries such as a violent blow received on the top of the head, by striking it against the ceiling of a low stable, or by the brutality of man, &c.

The Treatment of this disease is extremely easy; if the accident is recent, it will often give way to one or two applications of a strong blister, and a copious fomentation of warm water twenty-four hours after. By this simple treatment, carie of the bones, and ligaments of the head and neck, will be prevented. But when matter and sinuses are formed, the disease requires more bold and scientific treatment: we must begin by giving a free discharge to the matter or pus at the inferior and lowest part of the abscess in proper time, by opening every hole or sinuse with the knife, by making an incision through the whole extent of the cavity, when it can be done with safety, and then introduce a seton or two on each side of the head, or in the cavities or sinuses themselves, which should be moved every day, and washed with spirits of turpentine, taking care to keep a free and constant discharge, until the bottom of the wound gets sound, if the bones of the head or neck are greatly enlarged, and carious; in this deplorable state the actual cautery (or red iron) must
be introduced to the bottom of every sinuses, in order to produce exfoliation of the rotten particles of bones as quick as possible; which operation is often found necessary to be repeated more than once, in order to keep the orifice open, until all the sinuses are completely filled up, without which no cure can be expected; and, indeed, it is entirely owing to this circumstance, that the cure of the poll-evil is often rendered impracticable.

But, as I have frequently succeeded in curing some very obstinate cases of this kind, I shall here take the liberty to mention the following, which came lately under my care at the time I was quartered at Brabourn-Lees. A farmer of that neighbourhood sent one of his horses to Sir Edward Knatchbull, which was affected with an incurable poll-evil, (as it was thought by every farrier, &c.) to be killed for his hounds: but, as the horse was a good one, Sir Edward sent it to me; and, indeed, he took the trouble to come himself with the servant to consult me, if any thing could be done to save the animal's life.

After having examined attentively the state of the poor sufferer, I thought all hopes of a cure entirely uncertain; or, if it should prove successful, it would have taken a great deal of time to do it, as the sinuses were very deep and
numerous, the nostrils wide open, the eyes convulsed, and the head contracted upwards, which symptoms announce a dreadful state of the disorder: yet, in this miserable situation, I was pressed by the above gentleman, to try the best I could, even for experiment sake. Accordingly I began the treatment; first, by having the places washed clean with hot water and soap, in order to clear all the holes and sinuses over the head from the immense quantity of rosin and tow that was crammed in every ulcer, &c. This done, I threw the horse on the grass, in the presence of Sir Edward and several officers of the 12th Light Dragoons, and with the knife and probe opened a passage to the different sinuses, in order to allow a free discharge to the confined matter: this being accomplished, I attempted to extract several rotten pieces of bone, in which I succeeded; and, in other places, applied the actual cautery, where it was required, to quicken the exfoliation, and to prevent the further progress of the disease. All this being completed, every sinuses were injected with spirits of turpentine made hot, and the whole dressed with clean tow dipped in spirits as above. The operation being completely finished, two setons were opened, one on each side of the head, just above the first vertebrae of the neck and the atlas.
The same treatment was continued three months, with some modifications, taking care to keep every sinuses open until the exfoliation of the bones were completed, after which the bottoms of every one of those cavities were put upon a most healthy appearance, a sound granulation took place, and soon after, it gives me pleasure to say, the animal was almost perfectly cured from this dreadful state, and totally rescued from death, when the 12th Light Dragoons left Brabourn-Lees for the king's duty at Hounslow; and I have had the satisfaction of hearing since, from good authority, that the horse was as well as ever he was in his life, and once more in the possession of the farmer, who had condemned him to the dog-kennel, not having employed scientific treatment, to rescue the animal from the cruel, illiterate practice of common farriers, or to save a life worth preserving.

PRICKING.

When a horse's foot is wounded by the farrier in shoeing, he is said to be pricked; the nail, instead of being driven into the horn'y sole only, is either forced into the lamina, or sensible sole of the coffin bone, or bone of the foot,
or so near to them as by its pressure, to give such pain to the animal as to cause him to go lame; and if the nail that produces the mischief is not immediately pulled out, inflammation gradually takes place; and in its further progress, matter is formed, which, if not allowed to escape by removing the shoe and cutting away the horn with a small drawing knife, spreads under the hoof, and, after some days, breaks out at the coronet. In this case, the mischief is not always discovered immediately after shoeing; the pressure upon the sensible or living parts of the foot, is sometimes too inconsiderable at first to occasion lameness: so that when the horse is observed to go lame, the farrier pronounces it to be in the shoulder, and the poor animal is often tormented with strong oils, blisters, and rowels to the shoulders, whilst the lameness is in the lower extremity of the limb; and in this way the disease is allowed to run such lengths, as to endanger the animal’s losing a part, or perhaps the whole, of his hoof. When a horse is pricked, so as to wound the sensible parts at once, he goes lame immediately after; and the cause being generally suspected, the nail, or even the shoe, is generally taken off, the horny part enlarged with a drawing knife, and the wound dressed with a mixture of venice and spirits of turpen-
tine, equal quantity of each, then bathing the foot in warm water, two or three times a day, or applying such remedies as are likely to prevent inflammation taking place, the lame-
ness may soon be removed, the shoe re-ap-
plicated, taking care not to suffer the shoe to press on the injured part.

When wounds of this kind have been too long neglected, or ill treated, and the matter breaks out at the coronet, in this case, the reader will refer to the article Quittor.

PROCIDENTIA.

The signs of this disease are so evident to the sight, that they need no description. The vilous coat of the intestines is turned, or protrudes so much out of the rectum, as to form a very large ugly wrinkled, or smooth and shining tumour, accompanied with an uneasiness and ineffectual desire to void the faeces, or dung.

A falling down of the fundament may often be caused by weakness in the part, which is greatly aggravated by diarrhœas, and particularly a tenesmus; an acrid humour falling on the part, as in cases of a general inflammation of the lungs, the intestines, and the abdominal viscera also.

The cure of this disease is sometimes diffi-
cult, particularly when it proceeds from a general inflammatory diathesis; when acrid matter is observed to occasion fruitless straining, so as to force down the inner coat of the rectum, give small doses of opium at proper intervals; if the habit is costive, give laxatives in such doses as to procure a gentle evacuation; if a diarrhoea attends it, it should be gradually checked; and if there be ulcers in the intestines, or if by the sharpness of the humours the mucus is abraded, marshmallows, starch, linseed, or any other glutinous glyster should be given three times a day or oftener; also if the prolapsed intestine be greatly swelled, as is often the case, it must be fomented with a decoction made with some discutients, such as camomile flowers, &c.

When the tumour gives way, use gentle astringents, composed of a decoction of Peruvian-bark and port-wine, equal quantities of each; applying at the same time a gentle pressure on the part until it returns to its proper situation. Should you succeed, you must endeavour to keep it in as long as possible, by applying a quantity of linen to the fundament, dipped in some astringent decoction, such as Peruvian-bark a quart, and acid of vitriol two drachms; or a decoction of thyme, sage, rosemary, or camomile, will be equally salutary.
But, as this disease is only the effect of another, we must pay the greatest attention to the malady that causes it.

When it proceeds from an acrid mucus, astringents must be carefully avoided, as they would evidently increase the irritation and endanger life. Should it not be attended with a fever, it will be advisable to give a ball composed of one drachm or two of aloes, with twenty grains of calomel, and a drachm of ginger powdered, mixed up with treacle; if this does not operate, it may be increased, and the same repeated twenty-four hours after. When the prolapsus ani arises from inflammation of the lungs and bowels, it will be removed as soon as those complaints are relieved.

PHYSICING.

The physic of horses is so sufficiently understood, even by the most illiterate farriers and others, as to require no description. I therefore shall limit myself to the following observations: The first of which will be, that more valuable horses have been lost by improper courses of physic, than from any other accidental cause: if this be true, it will evince the absurdity of purging horses in every disease, as is too frequently done. Since I must be allowed to say,
that the discrimination and judgment of a good veterinary surgeon, can alone determine when purgatives are requisite; and when, on the contrary, they are likely to be injurious. But, as such a discrimination is not easily understood by many practitioners, I will here introduce a short anatomical description of the stomach and intestines of the horse, by which means the danger of giving strong purgatives to this animal will be better understood; and perhaps a more rational system made use of hereafter. On the opening of the abdomen, we find that the situation of the intestines often differ in different subjects, according to the length and continuance of the peristaltic motion after death; which alters sometimes the situation of the small intestines in particular. The stomach is seen according as it is more or less distended, and the spleen is at the same time seen attached to its posterior part and left side. The cæcum intestine is proportionably very large in the horse, and terminates in a blind pouch, that a part of the contents of the jejunum may pass into the colon, without going into the cæcum. This intestine has no appendix cœci, or, as it has been called, appendicula cœci vermiculis.

The food, after getting into the stomach, passes into the intestine duodenum, and receives
a supply of bile and pancreatic juice, and there it undergoes a change. The cæcum always retains its contents for sometime, and probably receives some change in it for the secretion of its internal surface, as it may be considered as acting as a second stomach; its contents are always fluid, and are passed by it into the colon*. This viscus is extremely large in horses; and where it joins the ilium, it has a number of folds, or annular depressions and eminences, which act as valvulae coniuentes. After this, it forms a curvature, which necessarily very much retards the progress of its contents; but what makes it still more difficult and remarkable is, that the colon is here very narrow, and perhaps not the tenth part as large as it is nearer the ilium. From this circumstance it will be easily perceived, how detrimental and hazardous it must be to give strong purgatives to horses. By a powerful stimulant remaining too long in contact with the gut at this narrow passage, or in any other part of the bowels, inflammation is produced, in such a violent degree, as commonly terminates in gangrene and mortification. Perhaps a thousand horses die yearly from this circumstance. But as this peculiarity of structure does

* The structure and description of this intestine requires to be particularly noticed.
not exist in other animals, they may comparatively have stronger purgatives. After what we have therefore said concerning the structure of the stomach and intestines of the horse, it must be obvious to every man, how cautious we ought to be in the choice and in the dose of purgative medicines, previous to their being administered to that animal. It is surprising, however, to see the prejudice existing so long amongst all the stabularians, and even among some gentlemen, against the new method of purging horses: indeed, it is so great even among the latter, that men of the most cultivated minds will frequently hazard the lives of their horses through the ignorance of the groom, &c., rather than reject the ingredients of which their physics are for the most part composed, which are not only inert in their effects, but even pernicious. I have even known men of abilities discountenance a simple, but sure and efficacious dose of physic, only for not been prepared with jalap, rhubarb, syrup of buck-thorn, and other useless ingredients. There is another erroneous idea which prevails also among many gentlemen; that is, that three doses of physic are absolutely necessary to clear the horse from his gross humours, as it is called. This practice is even carried on to this day, without having any
regard to the nature of the case, whether it be inflammatory or local, or whether the animal is strong or debilitated, or without observing the breed, size, and constitution of the horse: although it is obvious, that, in a state of debility, such a course will diminish still more his remaining strength, rather than increase it; and in all cases where the strength and the nature of the complaint is not perfectly ascertained, a small dose should always be first given, which may afterwards be increased, if found necessary: by this means every advantage will be secured, without hazard. The same dose, however, at different times, will produce very different effects. By the structure and length of the intestines, and the slowness of their motion in the horse, it will be also readily admitted, that a powerful dose of physic will so increase their action, and forcibly propel their contents, as to produce, in some parts of the bowels, violent pain and spasms, which not unfrequently terminate in death.

Having represented the inconveniences resulting from an improper, or too large a dose of physic, I shall now endeavour to enumerate the different cases in which such medicines may be given, and, indeed, in which they are almost indispensably necessary, which are as follows: viz. first, in case of swollen legs; second, inflated
eyes; third, young horses should always have two or three doses of mild physic; fourth, those also that have cracked or greasy heels, from their high feeding or irregular exercise; fifth, horses coming from camp into warm stables, should have one or two doses of physic also. But, in all cases in which purging physics are administered, the practice of trotting horses violently, after the medicine has began to work, is both absurd and dangerous, being often followed by a super-purgation, which frequently terminates fatally. But when the desired effect does not readily take place, trotting exercise will tend to promote it. During the day the animal must be carefully supplied with bran mashes and warm water; warm clothing, particularly when out of the stable, must not be omitted. When physic does not operate at a proper time, the horse appears sick and griped; in this case it becomes necessary to give him a clyster of warm water, assisted by exercise. But, when the purging continues longer than usual, the safest method is, to administer a great deal of mucilaginous fluids, both in drenches and in clysters, which are to be continued with the greatest activity, until the animal is perfectly recovered.