When the swelling and inflammation is not very great; poultices of bran and sea water will generally be sufficient to cure the grease. Where any debility exists, the habit must be strengthened with nourishing diet, and plenty of gentle exercise.

HALTER-CAST

Is an accident extremely common in the cavalry regiments in particular, in consequence of the horses being kept a long interval of time without hay or any other food, which makes them very uneasy; this accident is occasioned by the animal’s endeavouring to rub his neck and head with his hind foot. I have known several horses that had their legs so fastened with their collar chain round the pastern joint, as never to be able to disengage themselves, and have fallen down with their head bent under their belly, and in that miserable situation have died in ten or twelve minutes; and where they have been so fortunate as to get assistance soon enough to save them, they have been found so cruelly mangled, as their life to be despaired of for several months. The cure of this consists in bathing the parts with lead water several times in the course of an hour, and the day after apply constant fomentations.
of warm water, and poultices of bran and marsh mallows well boiled; or linseed and boiled turnips, which must be kept constantly wet by pouring warm water on it, as often as it gets cold. When the skin falls off, and leaves the muscles and ligaments uncovered, as is often the case, the tendons and ligaments must be dressed with spirituous applications, such as tincture of myrrh and water, or spirits of turpentine; this last makes an admirable remedy for carious or rotten bones also. The fleshy parts must be dressed with an ointment prescribed in the articles grease and ulcers, &c.

**HIDE-BOUND.**

This is not an original disease, but results from some other, which has preceded it; such as feeding with rotten or mouldy forage, or keeping the animal in a state of starvation, a suppression of perspirable matter thrown back into the blood; also surfeit, farcy, mange, worms, fever, and diseased lungs, &c. will produce this disease. Hide-bound is nothing more than a close adhesion of the muscles paniculus carnosus to the ribs and skin, so as to render it immoveable.

It is however necessary here to observe, that almost every thin horse is more or less hide-
bound, according as the causes predominate that have produced it.

The cure of this disorder is extremely simple and easy, and it will be generally removed by keeping the animal upon a cool and nourishing diet, such as scalded bran and barley; or mashes, composed of wheat flour and two parts of bran, three times a day; his drink must be made as white as milk, with some flour and bran, and of this nutritious beverage the animal must be allowed to drink as much as he pleases.

Should the horse be a valuable one, the owner will find the following prescription one of the best cordials and restoratives that can be given in cases produced from debility, viz. take a quart of boiled gruel, with half an ounce of cinnamon bruised, when nearly cold, and ready to administer, add two new eggs to the gruel, whites and yolks, and two ounces of common salt, stirring and mixing the whole together, then give it with the horn, this drench may be continued as long as necessity requires. If worms are suspected to cause the horse to be hide-bound, then it will be necessary to give two or three doses of physic, for which see the article worms.
HUMOURS.

When a common farrier is called to a horse that is swelled in his legs, belly, or any other part of his body, to cover his ignorance he immediately pronounces that the animal is gross and full of humours; although he is for the most part totally ignorant of the etymology of what he calls humour. Thus he uses a word without signification, and without a knowledge of the particular kind of humour or fluid that is in fault, and must be ignorant of the proper method of altering either the quantity or quality; consequently his practice in many instances of swelling must be uncertain, and often dangerous; the mind being led off, both from attending to the proper means, and to the proper method of treatment, the animal too frequently falls a victim to the empirical jargon of humours.

To mention some of the errors extant on this head, the swelling of the legs, for instance, takes place, from the difficulty the blood finds in ascending upright from the lower extremities of the legs to the heart, and not from falling down from the heart to the legs, as was supposed by the most eminent writers, who al-
ways have erroneously said for several centuries past, that the humours have fallen into the limbs. Here again I must be allowed to repeat, that we are not to consider any changes that may take place in the fluids of an animal as primary, but the mere consequence of a defect in the vessels in which they have been secreted.

It is true that the force of the heart is the same in respect to the situation of the vessels, yet when an animal is erect, the blood vessels in the legs are much more on the stretch than when he is lying down; on the other hand, should the vessels be in a state of relaxation, or be relaxed by external injuries, they become incapable of forcing the fluids forward, and from this retarded circulation arises swellings in different parts of the body, particularly in the legs, the circulation being unable to push on the blood in a perpendicular column upwards. As a relaxation of the solids may be the cause of the complaint, so relief can only be had in such a case by restoring their former strength; and, according to the different causes that produce this malady, different remedies will be required. It is therefore evident, that the word humours, applied to the system in general, signifies a defect in the fluid spoken of, humour being only another word for fluid. The blood is the general humour or fluid, from whence all
the other humours or fluids in the body, except the chyle, are separated; naturally these humours or fluids, neither err in quantity nor quality, though they may, by consequence, become faulty either way, or in both at the same time. From this principle it will be easily perceived, that without a knowledge of the particular humour or fluid that is defective, we must be ignorant of the proper method of altering either the quantity or the quality. The qualities of all are changed by alteratives, but different alteratives are sometimes required, not only for the different humours, but also for the different states of the same humours; and as to the quantity, a redundance of red blood requires bleeding, an excess of serum requires purges or diuretics, and often both alternatively administered. And as whatever changes appear in the fluids are not to be considered as primary, but the mere consequence of a defect in the vessels or organs, in which they have been elaborated or secreted, our remedies must be directed to the latter in almost all cases, particularly in horses that have swelled legs from standing in the stables; for, although such horses may have been declared full of humours, and often supposed by farriers that nothing could relieve them but purging diuretics or alteratives, yet I have frequently experienced,
HYDATIDS

that exercise alone has been quite sufficient to remove these complaints, without the help of any medicines.

HYDATIDS

Are animals formed like bladders, and distended with an aqueous fluid, appearing in several parts of the body, as the abdomen, ventricle of the brain, liver, and kidneys; hydatids of the liver are usually found in a cyst, which is frequently of a considerable size, and has almost the consistence of cartilage. This cyst, when cut, is obviously laminated, but differing greatly in thickness. The laminæ which compose it, are formed of a light or a white amber colour. In one of those cysts may be found several hydatids, which lie loose in the cavity, swimming in a fluid. They consist of a round bag, which is composed of a white semi-opaque, pulpy matter, and contain a fluid capable of coagulation. In the inside of an hydatid smaller ones are sometimes found, these are sometimes attached to the larger ones, and sometimes floating loose in this liquor. The origin and real nature of hydatids are difficult, and almost impossible to ascertain; the general opinion however is, that they are a sort of imperfect animalcules; of this there
is not the least doubt in sheep, since they are often seen to move when taken out of the liver, and put into warm water; and they seem to retain their power of motion for several hours after the sheep has been killed. There is, however, some difference in the form of hydatids of sheep, and those found in the human liver; those of sheep having a neck and mouth appended to the bag, and those of the human liver being a simple uniform bag; this kind of hydatids that are found in the brain of sheep are of this species of animalcules. Some doubts have been entertained concerning hydatids having life, in consequence of never having been seen to move when put in warm water, after being taken out of the human body; this however, may originate from the body being allowed to remain for so long a time after death before it is examined, by which means they must lose their living principle.

When the bags of hydatids burst, and its contents fall into the cavity of the belly, a kind of ascites is the consequence; and their cyst are also subject to many ill consequences, such as adhesion to the adjacent parts, suppuration, &c.

Hydatids are found in the human subject and sheep. But it is not a common disease in horses. Hydatids found in the brain of sheep
HYDROCELE

Is a dropsy of the scrotum, or an accumulation of water lodged within the tunica vaginalis of the testicle. Horses are subject to this disorder as well as the human subject, although it does not so frequently take place in them as in man; this disease is very common in some parts of the world, where they never, or very seldom, geld their horses; in many districts of France, for example, and in Spain, Arabia, Barbary, Turkey, &c. and in many other places, in which nothing but an accident, or the greatest necessity, such as viciousness, could induce them to perform the operation of gelding; as they consider it to be very prejudicial to the figure, courage, and strength of the animal. It is therefore in those countries that cases of hydrocele are most frequently to be met with in horses. Indeed, a dropsy of the tunica vaginalis is a very uncommon disease in England, so that I have not been able to see a single instance of it this twenty years that I have practised the veterinary art in this country. This is owing probably to the very few horses

produce vertigo, or what is vulgarly called the Gid, and the only cure for it likely to succeed, is to trepan the animal.
that are left entire, so that the operation of castrating animals is certainly the surest method of preventing hydrocele.

The cause of this dropsy is owing to a preternatural discharge of water, which is continually separating on the internal surface of the tunica vaginalis for the moistening, or lubricating the testicle: this water accumulates faster in some subjects than others; as it enlarges, it becomes more tense and painful. The hydrocele must be carefully distinguished from a rupture, or other diseases of the scrotum and testes.

To perform a cure, we must first ascertain whether the water is lodged in the cellular membrane of the scrotum, or in the tunica vaginalis; because, in the first, it may be evacuated by making scarifications in the side of the thighs, and in the scrotum itself, taking care to avoid the blood vessels as much as possible, which is very easy to do, because they are extremely superficial on these parts.

If the case is a proper hydrocele, and if any other disorder is suspected to give rise to it, the original disorder must first be removed, but if there be no such disorder existing, the water must be evacuated with a trochar, or a lancet, pushed to the seat of the water, in order to its discharge. The perforation must be made in
Horses, to the interior part of the scrotum. The water being thus discharged, inject through the canula of the threcher, a mixture of wine and water, equal quantities of each, made blood warm, as much as will distend the tumour to nearly its original size. Let the injection remain three or four minutes, and then press it out. For want of port wine, a weak solution of blue vitriol, to the quantity of a scruple to a pint of water, will answer. If considerable inflammation arises, let the part be constantly fomented with warm water, and apply a poultice of bran and linseed flour, or boiled linseed water and bran at night.

HYDROPHOBIA.

This dreadful disorder is caused by the bite of mad dogs, wolves, cats, and other carnivorous animals, to whom it seems natural, scarcely ever appearing in other animals, except it be inflicted by those of the dog kind, but other animals having received the infection, may communicate it. The dread of water is a symptom, in some fevers, and in some particular inflammations, &c.

The smallest quantity of the saliva of a mad dog, and that either fresh or dry, will produce
this disease, the principal seat of which seems to be in, and produce an irritation of the par vagum and intercostal nerves. The following are the signs of madness in a dog: he becomes dull, and endeavours to hide himself; he seldom barks, but makes a kind of noise, refuses to eat or drink, flies upon strangers, but in this recent state of the disorder, he respects his master; his ears and head hang down, and he walks as if overpowered with sleep; in this stage, though dangerous, it is not so bad as afterwards; because, as the disorder continues, the violence of the symptoms increase, and the animal breathes quick and heavy, hangs out his tongue, and froths greatly at his mouth, which he keeps perpetually open; sometimes he walks as if he was asleep, and then suddenly runs in any direction; at this time he forgets his master; his eyes look red and full of tears; his tongue is of a lead colour, he is suddenly exhausted, and he grows faint and weak, often falls down, then rising up, attempts to fly at every thing with the greatest fury. This stage continues seldom longer than five or six days, at the end of which period death generally terminates the disease. It is very remarkable that when a dog is mad, every other animal avoids him, and flies from him with horror.

The symptoms, however, differ in different
HYDROPHOBIA.

subjects, and according to the degrees of infection communicated; the symptoms appearing in some animals a week after the bite, and in others not until many weeks; but this depends entirely on the magnitude of the wound, and the quantity of saliva received into the system.

When horses, oxen, &c. are the subjects of this disorder, the symptoms are in general the same as above described; I have seen several horses, cows, &c. that had been infected with this disorder from the bite of a mad dog, but I never saw one cured of it. When the virus is once introduced into the system, and indeed, when this malady is communicated to brute animals, it is infinitely better to destroy them, without any regard to their species or value, than to try any method of treatment, in so deplorable a state, by which means you will not only avoid the danger of infection yourself, but also an incalculable mischief to others will be prevented.

Nevertheless, when an animal is of great value, and the accident recent, and before the bitten parts begin to swell, and discharge a kind of disagreeable ichor, &c. the cure may be successfully attempted, by such means as to destroy the peculiar acrimony which occasions the disorder; and the best mode that can be adopted, is, immediately on the bite being
given, to cut out the ragged flesh or skin, and apply the actual cautery, as deep as the parts can possibly admit, blistering the surrounding parts immediately, so as to produce a constant discharge.

I have seen a good effect in two instances, attending the following method, that is, if the wound be small, make it larger; and filling it with gunpowder, set fire to it; this will produce a free discharge for some time, which must be dressed with compound tincture of aloes and myrrh. It is probable that the action of the ignited gunpowder in this case is of very great service. If a horse has been bit by a mad dog, in the early stage of the disorder, one or two alterative balls every day will be of very great service; accordingly, take vitriolated quicksilver and opium, twelve drachms of each, powdered ginger three oinces, Venice turpentine a sufficient quantity to form the mass, and divide it into twenty-four balls; give one in the morning, and another at night, or perhaps once a day will be sufficient.

If the virus has made farther progress in the system, mercury must be given by the mouth, and also by friction, until salivation takes place, which should be kept up and regulated very gently, during two or three weeks; for that purpose, the mercurial ointment should
be well rubbed into the wound itself, and particularly the throat, two or three times a day. If the ptyalism is too violent, which is often the case in brutes, the spasmodic symptoms will be abated by giving a dose of purging physic; composed of aloes seven drachms, calomel half a drachm, mixed up with turpentine. I also strongly recommend to throw oil into the system, by gisters, and by the mouth.

HYDROCEPHALUS

Is a disorder of the brain very common to children, which often terminates fatally, if not remedied in proper time. In the human subject it is divided into two different sorts,* one extern, and the other intern; in the latter, the water is in the ventricles of the brain. Instances of this disorder are related by authors, where water has been found in the heads of children to the quantity of half a pint. But horses, and other animals, (sheep excepted) are not so subject to this disorder, unless produced from a

* It may be observed here with propriety, that this disorder has a striking resemblance to the staggers in horses, which disease is also divided into two stages; one of which being merely a simple inflammation of the dura and pia matter, and the other a general inflammation of the brain; either of these produce an hydrocephalus in brutes, particularly in horses and sheep.
violent blow, or other external injury done to the head. In this case, however, the quantity of water taken out of the ventricles never, or very seldom, exceeds two ounces.

I saw a case at the veterinary college, of a horse that died with a dropsy of the ventricles of the brain; at the opening of the head the quantity of water was as follows, viz. one ounce, two drachms, one scruple, and sixteen grains.

INFLAMMATION

Is an increased circulation in any part arising from irritation, external or internal; spasms, and inflammation produce each other, by which sensibility and irritability are increased, and produced in a part that did not possess them before.

Inflammation receives different names, such as the strangles, cold, or catarrh, inflammation of the brain, fever, inflammation of the lungs, intestines, kidneys, bladder, &c.

* Irritability is of two kinds, viz. the one inflammatory, and the other spasmodic; the first arises from distension, or continued irritation, and is always attended with a considerable degree of violence, producing fever and a quick pulse. The other kind is confined to the expanded brain, and never affects the pulse, or produces a fever; but these two kinds may exist together.