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.
INFLAMMATION.

External inflammations are usually divided into two classes, one of which is called phlegmonous, and the other erysipelatous; the seat of the first is in the sanguinary arteries and the cellular membrane; the seat of the erysipelatous is in the skin, or other internal membranes, not cellular.

The principal effects of inflammation are heat, pain, and accelerated pulse, and dryness of the mouth and tongue. The symptoms of an external inflammation are a redness of an external part, with heat, and a painful tension. The heat is excited by the reciprocal action and re-action of the solids and fluids, the irritation on the fibres increasing the action of vessels; the velocity of the fluids are thereby quickened, and thus heat is excited in proportion as there is crassamentum in the blood. Pain is excited by the distension of the vessels in a part already become preternaturally sensible. The quickened pulse is from that law in nature, by which the heart always increases its efforts, to free its subservient vessels from any injury they may sustain from accidental or preternatural irritation.

The dryness of the mouth and tongue proceeds from the stricture in the extremity of the vessels, whose use is nearly abolished by irritation.

The redness, heat, and painful tension of the
skin proceeds from the quantity of blood sent to the part.

The treatment of inflammation the reader will find fully described under the several heads of diseases of which it constitutes a part, or noticed under the names of the parts which are so affected.

INFLAMMATION OF THE BLADDER.

The urinary bladder and its neck is extremely subject to spasm, inflammation, morbid contraction, calculi, &c. which produce different symptoms. Inflammation of the bladder may arise from a defective action of the mucous glands situated between its coats, which may prevent the mucus from being secreted in sufficient quantity to afford protection against the irritation of the secreted urine; or it may arise from calcareous concretions passing from the kidneys by the ureters, into the bladder, causing violent irritation in their passage. An inability to empty the bladder frequently takes place in consequence of riding a horse to the end of a journey without permitting him to stale his water when wanted, which neglect produces often considerable distension of this viscus, and the neck of the bladder becomes so contracted that no urine can be evacuated. The male subject is oftener troubled with diseases
in the bladder than the female, because in the latter the urethra is a great deal shorter than in the male. When present in male subjects, there is little urine voided; and by feeling the bladder up by the rectum, it is found distended; but if the kidneys be inflamed there will be little urine secreted, and of course little or none in the bladder; this circumstance, therefore, points out two different diseases, requiring different modes of treatment.

The symptoms of inflammation of the bladder, or of the neck of this viscus, is universal coldness of the extremities, frequently attended with cold sweats; the pulse is quick; the hind legs are extended wide, with a constant attempt to stale; and the urine continually discharged, but in small quantities. When this is the case, to effect a cure, our attention must be directed to the removing of the inflammation, and giving such medicines as may bring the vessels to their proper action.

The inflammation may be removed by bleeding largely, and according to the animal's strength. His drink should be mucilaginous fluid, composed of linseed, marshmallows, or gum arabic, which may be used to the quantity of a quart every hour, or may be given as a common drink, if the animal takes it itself. Large clysters of warm water also may be thrown upon the rec-
INFLAMMATION OF THE BLADDER.

tum, with great advantage, as they will be extremely useful, by acting as an internal fomentation to the bladder, rectum, &c.

In cases of inflammation of the bladder, spasm of the neck, or any inflammation of the kidneys, we must abstain from the use of diuretics, and all fluids, as much as possible. Should the above treatment fail, and the disease continue to increase, our last resource must be to puncture the bladder by the rectum, with a small lancet, which will give immediate relief; or we may introduce a stick into the urethra, as far as the direction of the canal will admit, as it is not possible to introduce an instrument into the bladder which will preserve its curvature all the way. We therefore may introduce a piece of pliable wood, or whalebone, to the angle at the os pubis, as near the rectum as possible, with safety; we may also make a cut upon it, and introduce the female catheter, or similar tub, without removing the stick, to prevent our losing the incision, taking care to avoid the instrument's passing into the cellular membrane, instead of entering the bladder. We may likewise puncture the bladder through the inferior part of the abdomen, as near the os pubis as possible, that we may not wound the peritoneum anteriorly; by this method, the operation recommended through the rectum may be per-
formed without exposing or opening the cavity of the abdomen.

INFLAMMATION OF THE KIDNEYS.

The kidneys of horses are very liable to disease, especially inflammation, which is often brought on by the frequent use of diuretics, in consequence of being so powerfully affected by these kind of medicines, particularly in old and debilitated subjects; yet it must be admitted, that from these remedies, when judiciously employed, we receive great advantages.

The most conspicuous symptoms of inflamed kidneys in horses, are these: the legs of the animal are placed at a considerable distance from each other; he experiences great pain from the pressure on the loins; he frequently attempts to void urine, though, from introducing the hand into the rectum, we can perceive little or none in the bladder. When only one kidney is inflamed, the other will secrete; but the natural quantity is diminished, in consequence of the affected one. I have found, however, on dissecting a kidney quite decayed, none of these symptoms were to be discovered; in such case, we are to consider inflammation of the lungs, or some other part, to have been the cause of this
effect on the kidneys; for inflammation of the lungs is more or less attended with some general inflammatory diathesis; in this case it is evident that the original inflammation is to be first removed. It is necessary, however, here to repeat once more, that the greatest attention ought to be paid to the state of the bladder, in order to distinguish the inflammation of its neck from that of the kidneys. This is easily done by introducing the hand up the rectum, and feeling whether the bladder be distended or not; if full, the kidneys perform their proper functions, and are consequently sound; and the neck of the bladder must be considered as the seat of the disease, being inflamed, or otherwise diseased, so as to prevent the evacuation of the urine.

Incipient inflammation always increases the secretion of the glands, as there is more blood sent into them; but when inflammation is fairly formed, then they do not secrete at all.

Treatment. Any thing that has a tendency to irritate the kidneys is injurious; not only diuretics, but cordial medicines also; even the most simple liquids must be refrained from. A cessation of the offices of the affected organs, large bleedings, clysters, and gentle purgings, are the most important remedies to be made use of. Cold fomentations to the loins also are
sometimes advantageous; but if this application does not succeed, the actual cautery over
the loins must be applied, which is one of the best remedies we can employ for inflamed kid-
neys. The animal should not bear any weight on the loins, nor have any exercise in this dis-
case, nor in any other where there is acute in-
flammation. We should, in fact, in this respect,
follow the same mode as a surgeon does in treat-
ing a broken leg in the human subject, by en-
joining strict rest. Blisters are by no means to
be used, as the kidneys will be still more irri-
tated by an absorption of the cantharides.

We must also pay the greatest attention to
give food of easy digestion, and that which con-
tains the least moisture, in order to make the
secretion of the kidneys as little as possible.

There are horses that void their urine in large
quantities, and very high coloured. This symp-
tom shows that the secreting vessels of the kid-
neys, and absorbents of the bladder, have acted
with great energy; but very red or yellow urine,
voided in a small quantity, indicates the too
great action of the urinary absorbents, and not
an inflammation of the kidneys. Therefore, the
treatment of this is confined to bleeding, plenty
of diluents, and mucilaginous drinks of linseeds,
&c. made white with bran, in the way of warm
water gruel, and marshes, will make a very
proper and judicious regimen in the case of high-coloured and thick urine.

INFLUENZA

Is nothing more than an universal cold or catarrh, attended with fever taking place at some particular times of the year; and it is, I believe, this periodical return that has induced many writers to think the disorder was more or less contagious*. But the reason is obvious why the disease is more or less dangerous, which will be found to be owing to the previous state of the animal's constitution, or according as the distemper happens to be more or less severe at the time it is caught.

For the causes, symptoms, and treatment of the influenza, the reader is directed to the articles, Cold, or Catarrh, Fevers, and Epidemic Disorders, &c. under which heads he will find it fully described.

* I have observed, that every epidemical disorder in horses takes place in consequence of keeping several horses affected with cold, strangles, catarrh, and fever, in the same stable, particularly when attended with any discharge at the nose. Experience has proved, that in such a case nine horses out of ten will catch the disorder, if they are in the same stable, without separate stalls, and a free circulation of air; these two are the most predominant causes that produce epidemical disorders in horses and other animals.