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A TREATISE
ON
THE HORSE
AND
HIS DISEASES.
ILLUSTRATED.

CONTAINING AN "INDEX OF DISEASES," WHICH GIVES THE SYMPTOMS, CAUSE, AND THE
BEST TREATMENT OF EACH; A TABLE GIVING ALL THE PRINCIPAL DRUGS USED FOR
THE HORSE, WITH THE ORDINARY DOSE, EFFECTS, AND ANTIDOTE WHEN A
POISON; A TABLE WITH AN ENGRAVING OF THE HORSE'S TEETH
AT DIFFERENT AGES, WITH RULES FOR TELLING THE AGE
OF THE HORSE; A VALUABLE COLLECTION OF RE-
CEIPTS, AND MUCH OTHER VALUABLE
INFORMATION.

BY
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ENOSBURGH FALLS, VT., U.S.A.

REVISED EDITION.

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PREFACE.

It has been one of our greatest aims, in preparing matter for this book, to make it as plain as possible for non-professional readers, and to give them information which is of the greatest importance to horsemen, and yet avoid all technical terms as much as possible, and also condense the book as much as we can without leaving out the real essential information in treating each subject.

It contains an *Index of Diseases*, giving a description of each, with causes, symptoms and treatment. Also, a large collection of *Valuable Receipts*, of which many single receipts are worth, to every horse owner, several times the price of the book.

The treatment given for each disease can be relied on as being the best. To aid non-professional horse owners, in deciding what the disease may be, we give engravings which show the positions taken in the different stages of diseases, and which are of great value in coming to a positive conclusion as to the nature of the disease.

EXPLANATION OF THE ENGRAVING ON THE COVER.

1. Forehead.	11. Loin.
2. Jaw.	12. Hip.
3. Throat.	13. Stifle.
4. Breast.	14. Thigh.
5. Shoulder.	15. Hamstring.
6. Arm.	16. Point of the Hock.
7. Large Pastern.	17. Hock.
8. Small Pastern.	18. Croup or Rump.
9. Withers.	19. Dock.
10. Back.	20. Cannon-Bones.

INDEX OF DISEASES.

ABSCESS OF THE BRAIN is caused by some injury to the head.

Symptoms.—Refuses food ; acts dull ; a slight oozing from a trivial injury upon the skull ; the animal is prostrated, and while lying down continues to knock his head against the ground violently until death ensues.

Treatment.—No treatment is of any service.

ABDOMINAL DROPSY is usually the result of chronic inflammation of the bowels.

Symptoms.—Head hanging ; mouth dry ; membranes look pale ; pulse hard. If the horse turns about suddenly the act will elicit a grunt. Pressure on the abdomen will cause him to groan. A lack of spirits ; lies down constantly if left to himself ; is restless, thirsty, no appetite ; is weak, abdomen enlarged yet the horse quite thin in flesh, hide-bound and constipated. One of the legs and the sheath are sometimes swelled.

Treatment.—Begin the treatment as soon as you can decide as to the nature of the disease. Give, night and morning, 20 grs. extract of belladonna, 10 grs. sulphate of quinine, 35 grs. iodide of iron, $\frac{1}{4}$ gr. strychnia. Mix, and give at each dose. Mix 5 ozs. tincture of iodine and 2 ozs. croton oil, and apply a little to a portion of the abdomen by rubbing down to the skin and shifting to a different location when the skin becomes sore. Some cases are incurable.

BOTS.—The stomach seems to be the natural nursery for the protection and the propagation of the stomach bot. When the eggs have remained in the stomach for a year they become a perfect chrysalis (that is, the form of a butterfly before it reaches the winged state), and then they release their hold of the stomach and are expelled with the dung. It will be provided with wings in a short time, and will fly about commencing the propagation of its species which passes through the same period of incubation.

They are of two kinds, stomach and fundament bots. The stomach bots are the result of turning horses into pasture in the summer months, and are produced from the eggs laid on the fore legs of the horse by the bot fly.

Symptoms are an unthrifty coat, and loss of flesh after running out to pasture.

- No. 1. The female fly about to deposit an egg.
 " 2. The male fly.
 " 3. The egg its natural size.
 " 4. The egg magnified.
 " 5. The newly hatched bot.
 " 6. The bot fully grown.
 " 7. The head of a bot magnified.
 " 8. The chrysalis.

All horses which run out to grass are quite sure to have bots in their stomachs, and as there is so much misconception about bots and their destructiveness to horses we copy the result of a series of experiments with bots three-fourths grown.

When immersed in rum they live twenty-five hours; decoction of tobacco, eleven hours; strong oil of vitriol, two hours eighteen minutes; essential oil of mint, two hours five minutes. Were immersed without apparent injury, in spirits of camphor, ten hours; fish oil, forty-nine hours; tincture aloes, ten hours; in brine, ten hours; solution indigo, 10 hours. A number of small bots, with one that was full grown, were immersed in a strong solution of corrosive sublimate, one of the most powerful

poisons; the small ones died in one hour, but the full grown one was taken out of the solution, six hours after its immersion, apparently unhurt.

It will be seen by the above experiments, that no medicine can be given which will affect the bot, that will not destroy the coating of the stomach, and injure or kill the horse. No veterinary surgeon can distinguish the symptoms of bots from those of colic. In fact, there is but little doubt that ninety-nine out of every one hundred cases of belly ache are no more nor less than colic and not bots, and should be treated as we direct in the treatment of colic.

Treatment.—The general condition of the horse should be improved, so that the debilitating effects of the bots may not interfere with the general health of the horse. It is generally considered impossible

No. 1. The female about to deposit an egg.

" 2. The egg magnified.

" 3. The bot.

" 4. The chrysalis.

" 5. The male fly.

to expel or destroy the bots. Give the following tonic medicines to improve the general condition: pulv. gentian $\frac{1}{2}$ lb., pulv. copperas $\frac{1}{2}$ lb., pulv. fenugreek $\frac{1}{2}$ lb., pulv. elecampane $\frac{1}{2}$ lb. Mix well, and give a large tablespoonful once a day.

Fundament Bot.—Like the stomach bot, this is also the result of running out to grass. Instead of the eggs being deposited on the legs they are deposited on the lips of the horse. They are found in the rectum, and often seen about the anus and under the tail.

Treatment.—Injections of raw linseed oil, or of tobacco smoke.

BOWELS, INFLAMMATION OF.—The symptoms are very severe pain in the belly, varying from those of colic in being a continuous pain (while in colic there are intervals of rest from pain), rolling, pawing, sweating, rapid breathing with an inclination to shift about, with great fever and excitement. The disease comes on more gradually than colic (which see), legs and ears cold, belly tender and painful on pressure. (See cut for position of nose, etc.)

Causes.—Constipation, exposure to cold, drinking cold water in large quantities when hot, hard driving, diarrhoea, and as a sequel to colic.

The above named causes, when occurring in a horse predisposed to the disease, are quite liable to bring it on.

Treatment.—If the cause is constipation, give a quart of raw linseed oil, and, if necessary, add from four to six drops croton oil. If the cause is over-purging, give an ounce and a half of tincture of opium in a half pint of water. If

A GENERAL SYMPTOM OF ABDOMINAL IRRITATION.

the cause should be other than costiveness or diarrhoea, give thirty drops of the tincture of aconite root, and repeat it in two hours. Apply blankets, wrung out of hot water, to the belly, and renew them every fifteen minutes. Give injections of warm (not hot) water, castile soap, and a handful of table salt every half hour until the bowels move some. There is a diversity of opinion in regard to bleeding. It is my opinion that it is of doubtful utility in this disease.

BRONCHITIS.—This disease consists in an inflammation of the air passages of the lungs. It is a very common disease among horses, and is sometimes confounded with inflammation of the lungs (or lung fever), distempers and colds.

Symptoms.—Begins with a chill, fever, harsh cough, labored breathing, mouth hot and dry, with loss of appetite, and in one or two days a discharge from the nostrils will be observed.

Treatment.—Give the horse a good, comfortable place (not too close nor the reverse). Give fifteen to twenty drops tincture of aconite root, and repeat every four hours until six doses have been given, which will probably relieve the fever. Let the horse have plenty of cold water to drink. We would discourage the idea of bleeding, as it would be more likely to do harm than good.

After the fever has subsided (which will probably be about the second day), give a few powders of the following: Mix pulv. licerice root, pulv. fenugreek and pulv. gentian, two ounces of each, and divide into six powders and give in feed two or three times a day.

CHRONIC BRONCHITIS is the result of bad treatment of acute bronchitis, and when the attack has been prolonged for some time.

Symptoms.—A cough which seems to be confirmed, with discharge from the nostrils, and cough worse after drinking and in the morning.

Treatment.—Take of pulv. gentian and pulv. sulphate of iron, eight ounces each. Mix thoroughly and divide into thirty-five powders and feed twice a day until all has been given; then make an ointment of red iodide of mercury, one drachm, lard, one ounce, thoroughly mixed together. Apply the above named ointment down the course of the windpipe, and the next day apply sweet oil or lard to keep the skin from cracking. Repeat the application of the ointment in one week.

BURNS AND SCALDS.—When the burn is so deep as to destroy the skin and superficial tissues, we would recommend raw linseed oil, applied with bandages, to protect the parts from the air, and allowed to remain for several days.

But when the skin is not destroyed we have found that "Kendall's Spavin Cure" is an excellent remedy for such burns on man; so we feel certain it will work equally well on any animal.

CALLUS.—A callus is a thickening of the cuticle or of any soft part, caused by pressure or friction, or it may be the result of some injury which after remaining sore for some time finally heals, leaving a thick, hard and enlarged surface which we term callus, and which not only injures the sale of the horse but is also a constant "eye-sore" to the owner.

Treatment.—We can only recommend one course, as we have had no experience with any other which proved successful, and that is to apply Kendall's Spavin Cure two or three times a day, for several weeks, as directed for spavin. These can not generally be removed very quickly, yet if the above plan is followed out it is sure to be effectual.

CAPPED ELBOW.—(Shoe Boil.) This enlargement on the point of the elbow is on the side of the chest just behind the shoulder. It is a tumor (or sometimes a simple abscess) caused by direct pressure against the calk or heel of the shoe; particularly when the latter is allowed to protrude too far backward. Pads are made by harness makers which are quite useful in protecting the parts while the horse is lying.

Treatment.—If the tumor is soft and shows signs of containing pus, it would be well to open it and allow the matter to escape. Some recommend that the tumor be dissected out with a knife and then treated as any simple wound by keeping clean until it heals. "Kendall's Spavin Cure" has been used with very gratifying results for Shoe Boil. It should be applied twice a day for some time, the same as when it is desired to remove any enlargement. Some get an idea that if a bottle of "Kendall's Spavin Cure" is applied, it will do as much good to apply the whole in two to four days as to be as many weeks in using it, but we would like to have it remembered that it takes time to remove any enlargement, and especially if it has existed for any length of time, therefore we say it is not so much in the quantity used in a given time as in the length of time it is used. We know of no remedy that is so certain to remove Shoe Boil, when properly used, as "Kendall's Spavin Cure."

CAPPED HOCK.—This is a soft swelling on the point of the hock joint. It is caused by kicking in the harness or stable, or by being kicked by another horse, and rarely causes any lameness.

Treatment.—Kendall's Spavin Cure used as for capped elbow is a safe and sure remedy.

CAPPED KNEE.—Caused by some injury to the knee.

Symptoms.—A soft tumor in front of the knee.

Treatment.—If left alone it would probably burst and leave a permanent blemish. If the tumor is hot, bathe first with cold water to reduce the heat, or bind on cloths wet with cold water and change often, then apply Kendall's Spavin Cure as directed for capped elbow.

CAUTERY.—(*Firing*.) This cruel and inhuman practice is one which has been practiced in the past, and perhaps is to a slight degree now, but we sincerely believe it to be one which ought to be forbidden by all humane societies, as the cases which are benefited are *very* few, if any, that could not be benefited by milder and more humane means. (See Firing Horses.)

COLIC.—Colic is a very common as well as a very dangerous disease. There are two forms: Spasmodic and Flatulent Colic. The former is of a spasmodic nature, and will, in severe cases, run into inflammation of the bowels and cause speedy death, if not relieved.

Causes of Spasmodic Colic are drinking cold water when in a heated condition, costiveness, unwholesome food, undue quantity of food, etc.

Symptoms.—The horse is suddenly attacked with pain, and shows evidence of great distress, shifting his position almost constantly, and manifesting a desire to lie down. But in a few minutes these symptoms disappear, and the horse is easy for a short time, when they return with increasing severity until the horse can not be kept upon his feet.

A cold sweat generally breaks out over the body. The legs and ears remain at about the natural temperature.

He looks around to his flanks, mostly at the right side, as if pointing out the seat of the disease, scrapes the ground with his forward foot, and will almost strike his belly with his hind foot.

The horse heaves at the flanks; he kicks and rolls, and seems much excited, and sometimes acts as though he wanted to make water, which he can not do, on account of the urethra being spasmodically contracted. This symptom need not be treated (as it frequently is), for as soon as the horse is relieved of the colic, he will pass water freely. Therefore follow the treatment we give on next page, and relieve the colic as soon as possible.

FIRST STAGE OF SPASMODIC COLIC.

SECOND STAGE OF SPASMODIC COLIC.

As the disease advances the horse will frequently throw himself down with force, look anxiously at the sides and sometimes snap with his teeth at his sides, and strike upwards with his hind feet as they do many times with inflammation of the bowels.

THIRD STAGE OF SPASMODIC COLIC.

Symptoms of

Colic.

Attacked suddenly.
Intervals of rest.
Pulse not much altered in the early stage of the disease.
Rubbing belly gives relief.
Ears and legs of natural temperature.
Motion gives relief.
Strength scarcely affected.

Inflammation of Bowels.

Symptoms come on gradually.
In constant pain.
Pulse small and much quickened, and scarcely to be felt many times.
Belly quite tender and sore to the touch.
Ears and legs cold.
Motion increases pain.
Strength rapidly failing.

Treatment. Relieve the pain by giving one ounce sulphuric ether, two ounces of tincture of opium (laudanum) and a pint of raw linseed oil, and, if not relieved in an hour, repeat the dose. If there is not relief in a reasonable length of time after the second dose is given, some recommend bleeding from six to ten quarts from the neck vein, but we think it is *rarely* necessary to do this. Occasionally walk the horse about to excite the bowels to action.

The following mixture is said to be very good:

Take aromatic spirits of ammonia 1 pint, sulphuric ether 1 pint, sweet spirits of nitre $1\frac{1}{2}$ pints, gum opium (made fine) 4 ounces, camphor gum 4 ounces, assafoetida 4 ounces. Mix all together, and shake frequently for twelve or fifteen days; then filter or strain through flannel, and it will be ready for use. Dose—one tablespoonful in a little water, repeated in thirty minutes. A larger dose may be given sometimes in very severe cases.

Another excellent remedy, which is always at hand, is one heaping tablespoonful of saleratus mixed with one pint of milk, and given at one dose.

Always begin the treatment as soon as possible.

FLATULENT COLIC, WINDY COLIC, ETC.—The horse is uneasy, hangs the head, and exhibits a few of the general symptoms of spasmodic colic before there is any enlargement of the belly; but more particularly after, for as

soon as the belly swells the pawing commences, although it is not so violent as in spasmodic colic.

There is but little rolling or kicking at the belly as in spasmodic colic, and the horse is not inclined to move about much. After from one to four days the belly becomes much increased in size (if the disease is not checked), and the animal becomes restless.

Treatment.—Do not bleed for flatulent colic. Try an injection first, and if gas or wind come away with it, the patient will most likely recover soon; but if no benefit is derived from the injection, give the remedies as recommended for spasmodic colic. Let the horse be led around quietly until the medicine has had time to take effect, so as to prevent his falling or rolling, as it might cause rupture of the diaphragm.

FIRST STAGES OF FLATULENT COLIC.

CORNS appear in the angle of the hoof near the heel, and are generally caused by the shoes being worn too long, causing the shell of the hoof to grow over the shoe, which allows the weight to press upon the sole; or the shoe gets moved from its proper position, or perhaps never was placed there.

As a general rule, the production of corns may be laid to the shoer.

SITUATION OF A CORN.

Upon cutting away the horn there will be found a red spot; but if very bad, the color will be a dark purple; and it will be deeper seated.

Treatment.—Dress down the bruised part until quite thin, and apply Kendall's Spavin Cure quite freely, and then put on the shoe, so fitted that there will be no pressure on the part. Apply the Spavin Cure for several days. If the above treatment fails (which it probably will not), then dress down the bruised part, thin as before, and apply Kendall's Blister (which will be sent by mail on receipt of 50 c.), thoroughly rubbed in, and continue to apply Kendall's Spavin Cure, as recommended in treatment of bone spavin.

CURB.—This is one of the many diseases of the hock-joint, and consists of an enlargement or gradual bulging out at the posterior part of the hock. (See engraving.)

Cause.—Curb is generally caused by a strain from galloping on uneven ground, wrenching the limb, prancing and leaping, etc. It is one of the evils which occur among the better breed of horses. Man delights in

SOUND HOCK.

CURB.

CURB.

BANDAGE.

THE SUREST METHOD OF PRODUCING CURB.

showing off the animal he is mounted upon, and so it has ever been with man, woman or child; they are always pleased by the prancing of the horse, which, nevertheless, is a very fruitful cause of curb. Pulling horses up suddenly on their haunches is asserted to be a frequent cause of curb.

Treatment.—Perfect rest; if hot, bandage it and keep it constantly wet with cold water and saltpetre for a few days until the inflammation has ceased, then apply Kendall's Spavin Cure two or three times a day, and rub well with the hand. In some cases it is well to apply the bandage after each application

of Kendall's Spavin Cure, always applying the bandage as smooth as possible and rather tight. In very bad or very old cases we would recommend using Kendall's Blister, as directed for ring-bone.

DEBILITY.—This condition accompanies many diseases; for this reason anything which has a tendency to reduce the strength of the horse should be avoided while treating the various diseases, especially of the chest.

Symptoms of general debility are swelling of the legs, breast, belly and sheath. The horse is very weak, and staggers as he walks.

Causes are bleeding in treating diseases, starving, and insufficient and improper diet given to sick horses when they should have been supported by good and sufficient food during their sickness.

Treatment.—Give the tonic powders which we recommend under the head of Bots, once or twice a day, with a liberal amount of good feed and water, and allow him to recover wholly before putting him into hard work.

DEFORMITIES IN YOUNG COLTS, are usually caused by an insufficient nourishment ; but if the colt is taught to suck milk from a bottle or something else, so as to become well nourished, deformities of the limbs will usually be removed.

DIARRHŒA.—When this disease is not attended with pain, griping or pawing, as in colic, it will generally require no treatment, but if it continues, and the horse shows signs of pain or colic, there is reason for the belief that there is some irritating poison retained in the bowels which does not pass away in the excrement. (See Dysentery.)

Treatment.—Treatment that will allay pain is demanded.

Give twenty drops of tincture of aconite root, in a little water, and follow with a powder as given below, every three hours, until the horse is better. Take prepared chalk, 5 drachms ; catechu, pulverized, 1 drachm ; pulverized opium, 10 grains ; mix, and give as stated above. Give plenty of good cold water to drink.

When the diarrhœa is better, give bran mash for a few days, and add a little ground flaxseed if convenient.

DYSENTERY, ACUTE.—This disease in the horse is very violent, because the length and size of the intestines of the horse render any disease within them a very serious affair.

Cause.—Acute dysentery is caused by taking some acrid substance into the stomach, such as croton oil with aloes, which produce an inflammatory purgation ; or from the injudicious use of various poisons, such as tartar emetic, corrosive sublimate, blue vitriol, arsenic, etc., etc. Nearly all of these substances will be eaten readily if mixed with the grain, therefore any person not knowing the proper quantities of such poisons to give, should not venture to use them.

Symptoms are obscure at the commencement. As in nearly all disorders of the intestines, so in this, there is pain in the abdomen. The pain may be slight at first or it may be so violent as to be confounded with the pangs of colic ; the thirst is excessive ; the stench offensive.

The position of the body, as shown in the engraving, is expressive of abdominal pain.

SUFFERING FROM THE EFFECTS OF A
POWERFUL POISON.

Treatment the same as for diarrhoea, with larger doses of opium when the pain is violent. Keep the horse and stable clean, and give the horse good care. Do not be concerned about the bowels if they do not move at all for several days.

DISTEMPER.—(Strangles.) This form of sore throat is characterized by swelling between the bones of the lower jaw, which terminates in an abscess.

STRANGLES.

Cause.—A specific poison in the blood, which but few horses escape.

Treatment.—The opinions of different veterinarians vary in regard to the treatment, some recommending poultices while others forbid it, etc., but the following plan is undoubtedly as good a one as any.

Give grass or soft feed and but little, if any, medicine, and if thought best to do anything to

hasten the suppuration apply warm poultices, or some like blistering. The appetite will return when the abscess breaks or is opened.

EPIZOOTIC.—This disease attacks many animals at the same time, and originates in one common cause.

Treatment.—A few years ago, when nearly every horse in the country had this disease, hundreds were either not treated at all or improperly treated, and consequently many were left in a bad condition, which they did not outgrow for months, and others died for want of proper treatment. At this time I was called upon to prescribe for many, and I soon found that Prof. Flint's Horse and Cattle Renovating Powders were the very best thing I could give. Dose: tablespoonful three times a day at first, and then only twice each day.

Every horse that took the above powders recovered fully, and none were troubled with the bad after-effects which followed many that received no treatment.

FARCY.—This is a scrofulous disease affecting the horse.

Symptoms.—The hair looks rough and unhealthy; one of the legs will generally swell to a very large size, generally the fore leg—hot and painful—and in a short time will break out in small running sores, discharging a thin, unhealthy fluid, and sometimes the discharge is thicker.

On the side of the neck, body or inside of the leg will be felt a thick substance under the skin but somewhat elevated and hardened, and interrupted at distances with a small sore similar to that on the leg. In some cases soft, puffy swellings will be found about many parts of the body.

Cause.—Poorly ventilated stables which are overcrowded with horses; inoculation from the virus of the glandered or farcied horses, and this virus producing a ferment in the blood. Absorption of pus into the blood is liable to produce either farcy, glanders or some other zymotic disease.

Treatment.—Understanding the cause of this disease you will readily see what the treatment should be—that by removing the cause the effects will cease. Give a tablespoonful of sulphite (not sulphate) of soda twice a day.

This remedy will stop all fermentation and purify the blood. It would be well to continue the sulphite of soda two or three times a week for a few weeks after the horse seems to be well.

After leaving off the sulphite of soda give the tonic powders as directed in the treatment for bots, to improve the general condition of the horse. Give good and generous feed.

Another plan is to give the following powders once or twice a day: Take sulphur, 8 ozs.; saltpetre, 4 ozs.; black antimony, 2 ozs.; mix, and give one tablespoonful.

Another mode of treating this disease is to give three drachms of sulphate of copper every night, in the food, until the horse refuses to eat. After a few days, repeat; but if the case is bad, give the medicine as a drench in water, for ten days, if he will not take it in his food.

The horse, as well as all his clothing and articles used in feeding him, should be removed from all healthy animals, as this is one of the contagious diseases of the horse.

FIRING HORSES.—I can fully indorse the following statements of Dr. Robt. McClure in regard to this inhuman practice. He says: "This is an operation which is a great favorite, and in much repute among horse doctors. For my part I think it not only cruel and barbarous, but unnecessary, doing no good whatever, and in many cases a positive injury, the effects of which will never disappear from the legs and body while the animal lives. Firing is intended by its advocates to prevent and cure spavin, curbs, sprains and ring-bones by scoring the parts with a red hot iron in lines over the part that is thought will be diseased or is already so." (See Cautery.)

FOOT DISEASES.—*Navicular disease.*—(See engraving on cover for location.)

This is a serious disease, and is sometimes very obscure in its symp-

toms, according to the stage of the disease. Fortunately this disease is rarely met with, but it is a fruitful cause of permanent lameness. It is many times attributed to some difficulty in the shoulder.

Cause.—Hard work upon pavements causing slight inflammation which is neglected, and the horse kept at work so that the inflammation continues until it ends in ulceration.

Symptoms are obscure and yet very much like many of the symptoms of other diseases of the feet and legs and shoulders. It is determined chiefly by an undue amount of heat in the foot, and by the fact that no disease can be found elsewhere or of a different character.

Treatment.—Raise the foot and pour Kendall's Spavin Cure on to the frog and the back part of the foot and heel, and rub it well up into the hair, repeating this process two or three times a day, for two or three weeks, or more, if necessary. In bad cases, if the lameness does not subside in two or three weeks, we would recommend to blister as recommended for ring-bone, and follow up with the use of Kendall's Spavin Cure. The above treatment has proved to be the most satisfactory of any treatment known to us.

Poultices sometimes relieve the pain.

FOUNDER. (*Laminitis*.)—This disease is inflammation of the sensitive laminae of the foot, of which there are two kinds, acute and chronic, the latter being a continuation of the former. The acute form is invariably cured, if properly treated, but the chronic form is generally considered incurable; it can be relieved very much, but the feet are always afterwards sore and tender in front.

Cause.—Allowing to drink cold water, when overheated and tired from overwork, standing in the cold air (or where the wind will strike the horse) while warm, driving through a river while warm, long and hard drives over dry roads, etc.

Symptoms.—The horse will stand upon his heels, with fore feet and legs stretched out as far as he can get them so as to throw the weight off as much as possible; and he can scarcely be made to move. The horse has fever and considerable constitutional disturbance, in the acute form of the disease.

Treatment (of acute founder).—Give the horse a good bedding of straw, in a large, well ventilated stall, so as to encourage him to lie down, which, by removing the weight from the inflamed parts, will relieve his sufferings very much and assist in hastening the cure. As soon as his bed is fixed, give him twenty drops of the tincture of aconite root in a half pint of cold water, poured into his mouth with a bottle having a strong neck, and repeat this dose every four hours until six or eight doses have been given. Also apply a cloth wet in ice-water to the feet, and keep wet with the same for

several hours until the severe pain has been relieved. Wet the cloths often, and continue for two or three days, or longer if necessary. Give plenty of cold water to drink. The above treatment should be adopted as soon as possible after the horse has been attacked with founder. Let the horse have rest until he has fully recovered. Give grass or mashes for two or three days, and then give a good and fair amount of feed.

After the treatment recommended above, if there should still be tenderness, we would recommend the use of Kendall's Spavin Cure to remove it, as directed for foot diseases.

Although bleeding is quite strongly recommended by some, yet I am firmly of the opinion that the above plan, if properly carried out, will be much more successful.

CHRONIC FOUNDER in its worst form is not curable, but may be palliated. The treatment should depend principally upon softening the hoof by oiling well with castor oil, and continuing to keep the hoof well oiled on the bottom and sides up on to the skin.

We would also recommend in shoeing to place a piece of sole leather which will cover the whole of the bottom of the foot under the shoe and drive the nails through the leather so as to hold it as long as the shoe remains on, then pack oakum or cotton batting saturated with tar under the leather so as to soften up the bottom of the hoof. This works admirably in many cases.

Some pare the soles of the feet and then allow them to stand in about six inches of sawdust, wet a little every morning for two or three weeks. This is also a good plan to follow when horses are recovering from acute founder.

The treatment most likely to effect a permanent cure is that recommended for foot diseases, which see.

FRACTURE.—The term fracture is here used to signify a broken bone. A fracture is termed *simple* when the bone only is divided; *compound*, when in addition there is an external wound of the integuments communicating with it; *comminuted*, when the bone is broken or crushed into several pieces.

The simple fracture is the only variety which calls for much notice, in view of the fact that it is usually of but little use to attempt to treat either of the other two varieties.

Many cases of simple fracture may be successfully treated so that the horse will be useful for many purposes, if not for driving.

Symptoms.—A broken bone is usually detected quite easily, especially when it is a long bone of the leg, as the horse has not the power to move, and also by the looseness of the leg. The horse is in great pain, excitement, sweating, etc.

A GOOD WAY TO SLING A HORSE WHEN IT IS THOUGHT BEST TO DO SO.

Treatment.—If in the summer season, place the horse in the field or yard, but in winter in a large, comfortable stable or in the barn-yard, if well protected from wind and storm. Do not give too much bedding nor allow anything to be in the way of the foot, so that it can be carried without interruption. Give twenty-five drops tincture aconite root every five hours, for the first twenty or twenty-five hours, to lessen the fever and pain.

Place the broken leg in a position as near like the other as possible in shape and also (by actual measurement) to be of the same length, for it is by neglecting the measurement that some are left to unite shorter than the sound leg.

When the leg is placed in the same shape and length of the sound one, apply a good coating of tar to the leg, around, below and above the point of fracture. Then wrap the whole leg in carded cotton or coarse tow, and place over this splints cut out of pieces of boards, which will rest evenly upon the leg prepared as above, and fill all unevenness with the tow or cotton.

Have three or four splints, so as to hold the leg in position constantly. Secure the whole by carefully applying a strong bandage, or by tying with soft cord, and make it perfectly secure, so that the horse will not move the leg where fractured before it has had time to unite.

It is considered by some as bad practice to sling a horse from his feet

in cases of fracture, and he will seldom put his foot to the ground until the fracture has united, so that it is not necessary to sling.

Examine the splints daily and see that they do not get loose.

Give the horse a liberal amount of good feed and cold water.

When the horse is kept in a stall it is well to make a hole in the floor, underneath the foot of the broken leg, so that he can stand with the leg at full length.

With the splints properly applied the horse may safely be left to himself and nature will do the rest.

FROST BITES.—A state of numbness or torpifaction of a part of the body, caused by intense cold, which, unless relieved by proper remedies, is liable to be followed by death of the part. Horses are most liable to be troubled with frost-bites on the heels and the back part of the hind legs, which swell badly, and are sometimes mistaken for scratches.

Treatment.—It is very important in the treatment of frost-bites that heat should not be applied suddenly, but that very cold water be applied, by which means the frost is extracted very slowly.

Any frozen parts should not be rubbed until the frost has been extracted.

After the heat has returned to the part, we know of nothing which we think will work better than Kendall's Spavin Cure, applied several times; as by so doing the great pain and soreness which is sure to follow is generally averted, and thus the bad running sores which sometimes follow are prevented. The above treatment is also well adapted to frost-bites on man.

GLANDERS.—This disease is alike fruitful of evil to man and beast, and is generally considered incurable.

A horse may have latent glanders for years, and work well, the disease being during this time as contagious as in its developed state.

Cause.—The cause is somewhat varied in different cases, and may be attributed to filth, starvation, or to debilitating diseases, as lung fever, catarrh or any disease capable of generating pus, which being absorbed into the circulation forms a ferment within the blood.

Symptoms.—The membrane lining the nostrils assumes a leaden or purple color, accompanied by a thin, acrid, transparent and odorless discharge. This is the first stage, during which the general health does not suffer and the horse may do his ordinary work.

The discharge grows thicker, and sinks when placed in water. The membrane lining the nostrils will be found to have sores, ragged and depressed at the top, with varicose veins leading to them from all sides.

The appetite fails, and the horse assumes an emaciated and dull appearance. He will be hide-bound, and his legs swell during the day and the swelling go down at night.

The ulceration of the nose is very bad, and the sores spread into his throat; the body also is sometimes afflicted with sores. The horse ultimately dies in a wasted condition.

Treatment.—Most horsemen recommend that the horse be shot as soon as it is decided that he is afflicted with glanders, as they consider the disease incurable, but if the following treatment is adopted early it may prove successful:

Give from one-half to one ounce doses of sulphite of soda at night, in cut feed, for several weeks, and five grains Spanish flies (powdered) with it. Give, at the same time, every morning and noon, a powder consisting of three drachms powdered gentian, and two drachms powdered sulphate of copper. Give the medicines for a long time, not only to cure the disease but to improve the general health. Give a good liberal feed, and change the feed often.

GREASE HEELS.—This disease of the heels and legs of horses is characterized by a white, offensive, greasy discharge from the heels of the horse. The skin becomes hot, tender and swollen, and sometimes sloughs away, leaving an ugly sore.

Cause.—Sudden changes of the temperature of the earth, whether it be from heat to cold or from wet to dry. This disease generally follows wet streets, stables or lands.

Treatment.—Keep the legs dry and cleansed well with castile soap and soft water; then apply, once a day, verdigris, one-half ounce; rum or proof spirits, one pint; mix, and shake well before applying. Or apply Kendall's Spavin Cure after washing well. Some use water, one pint; sulphuric acid, two drachms; corrosive sublimate, one drachm. Mix, and shake before using. Some cases will be cured by keeping clean and applying glycerine, four ounces; carbolic acid, one drachm; mixed, and applied twice a day. While some cases are cured quite readily, others will not heal for a long time.

For obstinate cases use the following: Take one pound concentrated lye and dissolve it in two quarts water, and bottle for use; when needed, pour a wine-glassful of the solution of lye into six quarts of cold water, and wash and bathe the heels for half an hour, night and morning. Dry the heels often after the bathing, as they will become very moist. (See Scratches.)

HEAVES.—This disease is due to rupture and enlargement of the air cells of the lungs, which lessens the value and usefulness of the horse.

There is every degree of intensity to be seen in this disease, from the case that is so slight that only the expert can detect it, to the one where the patient finds it very difficult to breathe, even when not being exercised.

Cause.—In cases of heaves, horses are always greedy eaters; and it is

generally found that they have been fed an enormous amount of hay or coarse food, which they are quite sure to eat if they can possibly find room for it.

Heaves are never found in racing stables, where the horses are properly fed; consequently, it is but reasonable to attribute the cause to overfeeding with hay and coarse feed.

Treatment.—Restrict the quantity of hay and increase the amount of grain feed, which will give the lungs increase of room to act.

I shall give here various receipts which experience has proved to be good.

LISTENING TO THE SOUNDS
MADE WITHIN THE WIND-
PIPE.

FAVORITE RECEIPTS FOR HEAVES.

1st. *Asafoetida* pulv. one oz.; Camphor gum pulv. one-half oz. Mix, and divide into four powders; feed one every other night for a week.

2d. Resin, two ozs.; tartar emetic, two ozs.; Spanish brown, two ozs.; cayenne, two ozs. Mix, and give two teaspoonfuls, twice a day, in the feed.

3d. A horseman with whom I am acquainted says he has cured several cases of heaves with oil tar. He gives the ordinary case a teaspoonful every night or every other night, by pouring it on to the tongue and then giving some grain which carries it into the stomach.

He says he has given very bad cases two or three tablespoonfuls at a dose with grand results.

He reports it to be the best remedy in use, and also good for any cough, or to put a horse in good condition; in fact, it is his "cure all."

4th. As far as our experience goes (which is strongly corroborated by the testimony of others), we have found Prof. Flint's Condition Powders a very excellent remedy for this difficulty, when fed quite freely for a few days.

HIDE-BOUND.—A term used to denote the adherence of the skin to the ribs when the horse is diseased. It usually arises from a deficiency in the quality or quantity of food, and is commonly an attendant on lingering diseases.

Treatment.—Give mixed feed—cut hay, bran and corn meal, wet with just enough water to cause the whole to keep together.

The following powders should be given in the feed, every night for two weeks:

Powdered gentian root, three drachmas; powdered sulphate of iron, two drachmas. Mix, and give for one dose.

HINTS ON FOOD.—1st. The foundation of many diseases is laid in

feeding all horses in the same proportions, without any regard to age, constitution, or the work which the horse is required to do. The impropriety of such a course is readily seen.

2d. Bad hay has not proper nourishment in it; therefore it would be poor policy to buy it simply because it is cheap, as it is often very dear in the end.

3d. Old horses will do better on chaff than on hay, as they can chew and digest it better.

4th. There is not sufficient nutriment in grass or hay alone to support a horse well under hard work.

5th. Corn which has been damaged is very injurious, as it will produce inflammation of the bowels and skin diseases.

6th. Oats and corn are the best nourishment if a horse is worked hard, but if not, it should be chiefly hay, because corn and oats supply more nourishment and flesh-making material than any other kind of food; but hay not so much.

7th. For a coach horse four to six quarts of good oats and eighteen pounds of good hay are usually sufficient. If a horse should be worked hard, he should have more of each; but if worked but little, he should have less.

8th. Chopped hay sprinkled with a little water, which has had a teaspoonful of salt dissolved in it, is quite pleasing to the taste of the horse, and is also more easily digested.

9th. Spring or well water is not usually as good for a horse as water from a stream or pond, as the former is usually hard and cold.

10th. Horses require and should have at least a pailful of water, morning and evening; or, what is better, give a half pailful at four different times in a day.

11th. A horse should not be driven nor worked hard directly after he has had a full draught of water, nor soon after eating heartily, as exertion prevents digestion.

12th. Do not allow a horse to become accustomed to drinking warm water, for if compelled to drink cold at any time it will be liable to cause colic.

13th. Do not work or drive a horse if he refuses his food, after drinking, until you have given him rest.

14th. Do not feed nor water a horse directly after his coming in very warm, but let him walk about until cool; groom him quite dry first with a wisp of straw and then with a comb and brush, and rub the legs well with the hand. When he is cool give him his grain.

HIP-JOINT LAMENESS. — This disease is generally seen in young horses and may be caused by rheumatism or by some accident, although it is due oftentimes to a hereditary taint.

Symptoms.—The leg appears shorter, and, when the horse is standing, is placed slightly under the body and not doubled up, or standing upon the toe, as is seen in diseases of hock-joint. In nearly all cases of so-called hip and whirl-bone disease, the true seat of disease will be found to be in the hock-joint. (See Spavin.)

In hip-joint lameness there is a dragging or swaying motion of the limb outward. An extra degree of heat will be found over this joint.

Treatment.—Give the horse absolute rest for a few weeks, and begin, when first allowed to rest, to apply cold water cloths over the hip-joint, which continue one or two days or more, until the heat and tenderness have been removed.

Then apply Kendall's Spavin Cure two or three times a day for two or three weeks, or longer if necessary, and allow a week's rest after stopping its use.

INFLAMMATION OF STOMACH *is caused* generally by some poison given to improve the coat of the animal. Some persons are in a habit of giving powders composed of poisonous drugs to improve the general appearance of the horse, and which, if given in proper quantities and sufficiently diluted, so as not to come in contact with the coating of the stomach while in its full strength, might perhaps do good in many cases, but when given by an ignorant person, it is sometimes given not only full strength, but in large doses, on the principle that, if a little will do good, a larger amount will do more good.

Symptoms.—The horse is frantic on account of the excessive pain, but the symptoms are not decided in all cases.

The following symptoms occur, but not all in each case; nor do they occur simultaneously: Great thirst; loathing of food; redness of the membranes; frequent eructations which smell bad; discharge of thick saliva; rolling, pawing, colic; striking at the belly; panting; tucked-up flanks; quick and small pulse; passing mucus in large quantities; straining; looking at the abdomen; loss of strength; convulsions; madness, and death.

Treatment.—Give at once 2 ozs. tincture of opium, 1½ ozs. sulphuric ether, and 2 ozs. magnesia, in one quart of cold gruel or milk, and repeat if necessary.

SUFFERING FROM ACUTE INFLAMMATION OF THE STOMACH.

If corrosive sublimate is known to be the poison, give fifteen or twenty raw eggs with the above drench.

INFLUENZA.—An epidemic disease occurring in the spring of the year.

Symptoms.—A chill, succeeded by increased heat of the body, and fever, cough, discharge of mucus from the nose, loss of appetite, great prostration, followed in a day or two with swelling of the legs, and, in some bad cases, of the belly, breast, etc. These symptoms vary some in different cases.

Treatment.—Cover the horse with a good blanket, and place him in a good comfortable stable, with proper ventilation but not too cold. Give twenty drops of tincture of aconite root in a little cold water, every four hours, until four or five doses have been given, and allow the horse plenty of good cold water to drink.

A FREQUENT SIGHT WHEN IT WAS THE CUSTOM TO BLEED AND TREAT TOO ACTIVELY IN THIS DISEASE.

Then give the following: Powdered gentian, 4 ounces; powdered fenugreek, 4 ounces; and powdered licorice root, 2 ounces. Mix, and divide into twenty-five powders, and give two or three each day. Allow the horse to have rest until he has fully recovered.

INTERFERING.—This is usually the result of weakness of the horse, although the blacksmith is frequently blamed for it, and perhaps justly, sometimes, on account of being somewhat careless, when the interfering might have been avoided with a little care. Yet the cause is generally weakness.

Treatment.—Give the strengthening powder recommended for the treatment of bots, and feed well.

KIDNEYS, DISEASE OF.—The straddling gait, as represented in the

engraving below, is not peculiar to any one disorder of the kidneys more than to another, but when it is seen it is always the result of some disorder of the kidneys.

SYMPTOMS OF DISEASES OF THE
URINARY ORGANS.

GRAVEL.—Calculi, stony or gritty matter formed in the kidneys, which passes off in the urine. It causes some irregularity in making water.

Treatment.—Give thirty-five drops of muriatic acid, in a pailful of water to drink, and repeat twice a week.

Bloody urine should be treated by placing warm water cloths over the back, above the kidneys, and giving flaxseed tea to drink, which will soothe the parts. When old horses are troubled with kidney diseases they can be helped a great deal by giving soft feed, such as boiled or steamed feed, or newly cut grass, with flaxseed tea and plenty of good cold water to drink at all times.

INFLAMMATION OF THE BLADDER.—Symptoms almost the same as those of inflammation of the kidneys. The tenderness is found when the horse is pressed upon under the flanks.

Treatment about the same as for inflammation of the kidneys, which see. Give a quart of raw linseed oil or other physic, as for inflammation of the kidneys.

INFLAMMATION OF THE KIDNEYS is caused by poor provender, hard work, slipping, taking a sudden cold after a hard day's work or drive, or after being under the saddle for a long time; and also, by an indiscriminate use of nitre or other diuretics.

Symptoms.—Quickened and short breathing, suggestive of pain; more or less fever, with quick, hard pulse; unwillingness to move the hind legs which the animal straddles apart when he walks, as shown in the engraving above; looking anxiously around to his flanks; urine scanty and high colored, and sometimes

TEST FOR INFLAMMATION OF
THE KIDNEYS.

bloody. The horse seldom lies down and almost refuses to move about, and crouches beneath pressure made over the kidneys, as shown in the engraving. This disease is sometimes confounded with colic, which see.

Treatment.—Do not give any diuretics, as they will do more harm than good. Use hot fomentations over the kidneys, and change the cloths often. In the first stage give twenty to forty-five grains of powdered opium, and fifteen grains of calomel, sprinkled on the tongue, and repeat every hour or two, for a few times, or while the acute stage continues. No food will be necessary during the acute stage of the disease, but it would be well to set before the horse a pailful of good linseed tea and allow him to drink all he will. If the pulse is quick and hard, as is usually the case, give twenty drops of tincture of aconite root, either between doses of opium and calomel or after it has been given, and repeat until the pulse becomes slower and softer. Give the horse a month's rest, and use carefully for some time.

LAMENESS.—It occurs as a symptom in spavin, ring-bone, bruises, sprains, fractures, and many wounds and injuries, which we treat of in their proper places. We do not know of any remedy which equals Kendall's Spavin Cure, for lameness of every kind, and it is equally good for lameness on man.

LAMPERS, (written also, *Lampass*).—A swelling of some of the lower bars of a horse's mouth; so named because formerly removed by burning with a lamp or hot iron.

Treatment.—Pinch or cut the bars until they bleed, and then rub in a little table salt, which is much better than burning the mouth with a red-hot iron.

LUNGS, DISEASES OF.—The lungs are subject to many diseases.

PNEUMONIA.—(Lung Fever). In this disease the substance of the lungs is inflamed, instead of the air passages, as in bronchitis.

Symptoms.—The horse will often-times have a discharge from the nostrils, following a sudden exposure to cold, after being kept in a warm stable, and then the disease is ushered in by a chill, followed by fever, which is increased for a short time; cold legs and ears; quick and wiry pulse; quick and difficult breathing; pain in the chest, which is aggravated by coughing; and a quivering of the muscles of the side and breast.

COMMENCEMENT OF INFLAMMATION
OF THE LUNGS.

The horse will not eat, and continually stands with his head down and ears lopped, and will not lie down nor move about; the nostrils are expanded.

If the ear is applied to the side of the chest or neck, a peculiar creaking noise is heard.

Cause.—Perhaps one of the most frequent causes is a hard or fast drive against a cold wind, after being taken from a warm, tight and poorly ventilated stable, where several horses have remained through the night; or some different alteration and sudden change of heat, cold or moisture in an animal not accustomed to work, or in one not in proper condition to work.

Treatment.—The stable should be a comfortable place; not too cold and yet well ventilated. Give the horse clothing according to the weather, but do not change from a heavy blanket to a light one, nor to one that is damp. Keep the legs warm with bandages.

POSITION ASSUMED IN THE LAST STAGE OF PNEUMONIA.

Give twenty-five drops of the tincture of aconite root, in a cupful of cold water, and repeat the dose every four hours, until five or six doses have been given, which will probably cause the horse to perspire freely. Care should be taken not to allow the horse to stand in a draft of air. Do not bleed, as some recommend. It was my misfortune, in my early life, to place a horse, sick with this disease, under the care of a so-called veterinary surgeon, who bled the horse freely, and directed to give him large doses of Dover's powder every four hours. I was not only the five dollars out which he charged me, but came very near being out a good horse. The horse was about ruined for life, and probably would not have lived but for my own timely interference, by supporting the horse with vigorous tonic and stimulating treatment. When the disease turned (as commonly expressed) the horse needed every drop of the blood which had been so cruelly taken from him.

After the horse has taken sufficient tincture of aconite root, as soon as he seems to have an appetite for food, a pint of crushed oats, thoroughly scalded, may be given during the day. Great care should be taken not to allow the horse a large amount of food at one time, which would overload the stomach, and might cause a return of the disease. Little and often must be the rule at first, and then the quantity may be increased, while the frequency is diminished. Do not give any hay for several days.

Raw eggs and other nourishing and stimulating articles may be given, if the horse shows signs of great weakness. The nourishment should be in a concentrated form, and hay and grass should be kept from the horse for a

few days, and then given in quantities small at first and gradually increased. The horse will not lie down until improvement has taken place.

PLEURISY.—This is an inflammation of the membrane covering the lungs and lining the cavity of the chest.

Symptoms.—A chill, fever, an occasional painful and short cough, and careful breathing, and a disinclination to turn short. A peculiar line will usually be seen running from the haunch, round the belly to the breast-bone. The breath is not so quick and short as in inflammation of the lungs.

Causes.—Broken ribs or wounds, and other causes similar to those producing lung fever.

Treatment.—The treatment should be about the same as for lung fever. Feed well while the horse is convalescing.

ABSCESS OF THE LUNGS.—This is sometimes the termination of lung fever, and is very much to be dreaded.

Treatment.—Should be the same as for glanders, and the patient should be supported, if necessary, by giving raw eggs, tonics, stimulants, etc.

NASAL GLEET.—This is a chronic discharge from the nostrils, of a whitish, muco-purulent matter. It is generally caused by neglecting to treat catarrh and colds properly. The horse may look well and feel well, and the general health be quite good.

Treatment.—Give a course of tonic powders, and feed well. Powders like those recommended in the treatment of bots will do well.

NAVICULAR DISEASE (See Foot Diseases.)

POLL EVIL.—This consists of a formation of pus like an abscess, and is familiar to all horsemen.

Cause.—Disease of the bone, or injury to the part.

Treatment.—Open the swelling as soon as it has become a little soft, before the pus has had time to burrow down among the bones, and thus prevent the spread of the disease.

Make a large opening so as to allow all the pus to escape, and clean out well, if necessary, with a swab, so as to remove all the pus, and do this twice a day as long as any pus remains. Syringe out with a solution of carbolic acid, fifty drops to each pint of soft water.

PROUD FLESH.—A name commonly used to describe an excessive growth of flesh on an ulcer, or excessive granulation. To cure this, sprinkle a little powdered blue vitriol or burnt alum on the surface.

QUITTOR.—A chronic abscess in the hoof, caused by a bruise or prick of the sole, or from the calk of one foot being pressed into the coronet of the other, confined pus from suppuration, corn, etc.

Symptoms.—The horse is very lame on account of the inflammation before suppuration takes place, but is relieved somewhat as soon as the quittor has burst.

Treatment.—This should begin as soon as any lameness is discovered from any of the above named causes, and the inflammation stopped, if possible, before suppuration takes place. Kendall's Spavin Cure, applied freely to any of the injuries which result in quittor, will prevent this termination, if applied in season; but if it is not cut short, then keep clean and apply a solution of carbolic acid, one ounce, to water, one quart.

Poultices of flaxseed meal are sometimes very useful.

RHEUMATISM.—In acute rheumatism there is great excitement and fever, with severe pain in the legs and joints. This pain is so severe that the horse hardly dares to move from the place he occupies, on account of the extreme pain which it causes. He has no unnatural heat in the feet, as in founder.

Cause.—Exposure to a draft of cold air when a horse has been heated, thus suddenly checking perspiration.

Treatment.—Place the horse in a good, comfortable stable, as soon as possible after it is discovered that he is afflicted with acute rheumatism, and commence the following treatment: Give the horse about twenty-five drops of the tincture of aconite root, every four hours, until five or six doses have been given.

Cover with a blanket, and give the horse general good care. Give the following powders as soon as the tincture of aconite has been given: Bicarbonate of soda, 4 ounces; sulphur, 8 ounces; saltpetre, powdered, 4 ounces. Mix, and divide into eight powders, and give two or three times a day, according to the severity of the case, and repeat if necessary.

Apply Kendall's Spavin Cure to the joints, or to any part which swells or is tender.

CHRONIC RHEUMATISM.—This is a frequent cause of lameness, and it is oftentimes quite difficult to decide fully as to the cause of the lameness.

Treatment.—For this form of the disease we recommend the same powders as given above for acute rheumatism, only to be continued a longer time, and to apply the Kendall's Spavin Cure to the afflicted parts. Only a small quantity need be used at a time, but it should be rubbed well down to the skin, and continued for several weeks if it should be necessary to continue so long. The Kendall's Spavin Cure, used twice a day, is also the *best external remedy* we know of for this disease in man; but it should be used for some time, as the disease, when of long standing, can not be cured in a few days. It may be applied, a small quantity at a time, and continued for from one to three or four weeks, if necessary.

RING-BONE.—(For position see plate of skeleton.) Ring-bone is the result, usually, of weakness, hereditary predisposition, or of a peculiar formation of the pastern joints which makes them poorly adapted to hard work; and therefore a provisional callus (or bony substance) is thrown out as a provision of nature to strengthen parts which are too weak.

Only slight injuries to such a joint as we have described above will in many cases result in the growth of a ring-bone.

Treatment. The treatment of ring-bone has been very unsatisfactory in the past and is still attended with much difficulty in some cases, especially those of long standing and on old horses; yet we feel certain that the fol-

RING-BONE.

1. The joint between the pastern bones.
2. The joint between the lower pastern (or small pastern) and the coffin bone.

lowing treatment will prove successful in a large share of cases, if persevered in. We find many persons who expect a cure too soon, and condemn the best treatment possible before they have used it long enough for it to have any effect whatever, and therefore we say if you would treat ring-bone successfully never stop in a few days, as so serious an affection can not be removed in so short a time. If it is of recent origin, and the horse is young, we feel confident that nearly all such cases can be cured with a proper use of Kendall's Spavin Cure; but if the case is of long standing, and on an old horse, the chances of a cure are lessened, and therefore we find it necessary in many cases to use, with the Spavin Cure, Kendall's Blister, as per direction on the bottle.

In using the Kendall's Spavin Cure, clip the hair over the bunch and apply from every other day to two or three times a day as seems to work best; rub well with the hand often. In most cases it would be well to apply soft soap, once in four to ten days, to soak up the scab, then clean off and apply Kendall's Spavin Cure again. In some very bad cases, where the Spavin Cure does not seem to remove the bunch and lameness, after using one bottle, it would be best to use our Blister, followed by the application of Kendall's Spavin Cure every day for two or three weeks, when the Blister can be repeated, if necessary.

In using Kendall's Blister clip the hair over the bunch and rub in the Blister well for ten minutes or more. Put on some sweet oil or other grease in two days. When the inflammation subsides wash with castile soap and warm water, and when it is dry apply Kendall's Spavin Cure as directed on bottle. If the case does not yield in two or three weeks, use the Blister again as before, followed by the Spavin Cure in two or three days.

Tie up the horse's head for a few hours after the Blister has been applied. We would say that this Blister works admirably alone in many cases (not