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A TREATISE
ON
THE HORSE
AND HIS DISEASES.

For explanation of numbers on this horse, see 2nd page.

PUBLISHED BY
B. J. KENDALL, M. D., ENOSBURGH FALLS, VERMONT.

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A TREATISE

ON

The Horse

AND HIS DISEASES;

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 RECEIPTS, AND MUCH OTHER

VALUABLE INFORMATION.

BY

B. J. KENDALL, M. D., ENOSBURGH FALLS, VT.

Illustrated by H. W. & A. E. HERRICK, Manchester, N. H.

CLAREMONT, N. H.,
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PREFACE.

It has been one of our greatest aims in preparing copy for this book, to make it as plain as possible for the non-professional readers, and give them information which is of the greatest of importance to horsemen, and yet avoiding all technical terms as much as possible, and also condensing the book as much as we can do 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 the 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 is of great value in coming to a positive conclusion as to the nature of the disease.

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Explanation of Engraving on 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

R., Burley James

INDEX OF DISEASES.

ABSCCESS 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 the 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 will elicit a grunt. Pressure to 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 sheath sometimes are swelled.

Treatment. Begin the treatment 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, $\frac{1}{2}$ 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 out to 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.

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 to

expel or destroy the bots. Give the following tonic medicines to improve the general condition. Pulv. Gentian $\frac{1}{4}$ lb. Pulv. Copperas $\frac{1}{4}$ lb. Pulv. Fenugreek, $\frac{1}{2}$ lb. Pulv. Elecampane, $\frac{1}{4}$ 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 linseed oil, or tobacco smoke.

BOWELS, INFLAMMATION OF. The symptoms are very severe pain in the belly, and varies from 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, &c.

Causes. Constipation, exposure to cold, drinking cold water, when hot, in large quantities, hard driving, diarrhœa, 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 4 to 6 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 the cause should be other than costiveness or diarrhœa, give 30 drops of the tincture of aconite root, to be repeated in two hours. Apply blankets wrung out of hot water to the belly and renew them every 15 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 15 to 20 drops tincture of aconite root and re-

A GENERAL SYMPTOM OF ABDOMINAL IRRITATION.

peat every four hours until six doses have been given which will probably relieve the fever. Let the horse have a 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. licorice 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 dischargo 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 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.

CALLOUS. A callous 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 callous, 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, and that is to apply Kendall’s Spavin Cure two or three times a day, for several weeks, as for spavin. These can not generally be removed very quickly, yet if the above plan is followed out it is quite 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 rec-

commend that the tumor be dissected out with the 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 this 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 let 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 practised 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, and the quantity of food, etc.

FIRST STAGE OF SPASMODIC COLIC

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 flank, 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.

SECOND STAGE OF SPASMODIC COLIC.

The horse heaves at the flanks; and kicks and rolls, and seems much excited, and sometimes acts as though he wanted to make water, which he cannot 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 below and relieve the colic as soon as possible.

As the disease advances the horse will frequently throw himself down with force, looks anxiously at the sides and sometimes snaps with his teeth at his sides, and strikes 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 a 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 one pint, sulphuric ether one pint, sweet spirits of nitre one and a half pints, gum opium (made fine) four ounces, camphor gum four ounces, assafoetida four ounces. Mix all together and shake frequently for 12 or 15 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 injections 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 time to take effect so as to prevent his falling or rolling as it might cause rupture of the diaphragm.

CORNS appear in the angle of the hoof near the heel, and are generally caused by the shoe 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 nev-

FIRST STAGES OF FLATULENT COLIC.

SITUATION OF
A CORN.

(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 \$ 1.00), thoroughly rubbed in, and continue as recommended above.

er was placed there. As a general rule, the production of corns may be laid to the shoer.

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 \$ 1.00), thoroughly rubbed in, and continue as recommended above.

CURB. This is one of the many diseases of the hock-joint, and consists of an enlargement or

SOUND HOCK.

CURB.

CURB.

gradual bulging out at the posterior part of the hock. (See engraving.)

Cause. Curb is caused generally by a strain

from galloping on uneven ground, wrenching the limb, prancing and leaping, &c. It is one of the evils which occur among the better breed of horses. Man delights in 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 the Spavin Cure 2 or 3 times a day and rub well with the hand. In some cases it is well to apply the bandage after each application of Spavin Cure, always applying the bandage as smooth as possible and

THE SUREST MANNER OF PRODUC-
ING CURB.

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 many 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 recommended under the head of Bots once or twice a day with a liberal amount of good feed and allow him to recover wholly before putting 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 continue 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, five drachms: catechu, pulverized, one drachm: pulv. opium ten grains; mix and give as stated above. Give plenty of good cold water to drink.

When the diarrhoea 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 quantity to give of such poisons 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.

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.

SUFFERING FROM THE EFFECTS OF A
POWERFUL POISON.

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 &c. but the following plan is undoubtedly as good 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 the following powders were the very best thing I could give

Take of pulv. liquorice 1 lb., elecampane 1 lb., pulv. fenugreek $1\frac{1}{2}$ lb., pulv. gentian $\frac{1}{2}$ lb., pulv. anise seed $\frac{1}{4}$ lb., ginger $\frac{1}{4}$ lb., black antimony $\frac{3}{4}$ lb., pulv. saltpetre $\frac{1}{2}$ lb., sulphur $\frac{1}{2}$ lb., epsom salts 1 lb., pulv. resin $\frac{1}{4}$ lb., hard wood ashes $\frac{1}{2}$ lb., copperas $\frac{1}{4}$ lb., mix well and give a 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 should be removed from all healthy animals, as well as all his clothing and articles used in feeding him, as this is one of the contagious diseases of the horse.

FIRING HORSES. I can fully indorse the following statements of Dr. Robt. Mc Clure 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 is 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 or 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 are already so." See Caution.

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

This is a serious disease, and sometimes is very obscure in its symptoms, 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.

Causes. 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 or 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. Is generally considered incurable if it has been of long standing. Probably the best treatment is to blister just above the hoof and keep well oiled as per direction for ring-bone.

Poultices sometimes relieve the pain.

FOUNDER. (*Laminitis.*) This disease is inflammation of the sensitive lamina 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; but can be relieved very much yet they are always afterward sore and tender in front.

Causes. Allowing to drink cold water, when overheated and tired from overwork, standing in a 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 &c.

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 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 2 or 3 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 2 or 3 days and then give a good and fair amount of feed.

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 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 under the shoe which will cover the whole of the bottom of the foot 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.

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 that 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 a long bone of the leg, as the horse has not the power to move it, and also by the looseness of the leg. The horse is in great pain, excitement, sweating &c.

Treatment. If in the summer season, place the horse in the field or yard and in winter in a large comfortable stable or in a barn-yard, if well protected from the wind, and storm. Do not give too much bedding nor allow anything to be in the way of the foot so 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 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 time to unite.

It is considered by some as bad practice to sling a horse from his feet in cases of fracture, for a horse 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 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 to apply Kendall's Spavin Cure several times; as by so doing the great pain and soreness which is sure to fol-

low 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 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, and 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 go down at night.

The ulceration of the nose is very bad, and the sores spread into his throat; also, the body 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.

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, which leaves an ugly sore.

Cause. Sudden changes of 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 oz; 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 ozs. 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 which finds it *very* difficult to breathe, even when not being exercised.

Causes. 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 the racing stable, where horses are properly fed; consequently, it is but reasonable to attribute the cause to over-feeding hay and coarse feed.

LISTENING TO THE SOUNDS
MADE WITHIN THE WIND-
PIPE.

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

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

Favorite Receipts for Heaves.

1st. Assafoetida 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. The Condition Powders recommended for Epizootic have proved themselves to be a most excellent remedy when fed quite freely for a few days. (See treatment of epizootic.)

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 drachms, powdered sulphate of iron, two drachms. 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 when 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 sufficient usually. If a horse should be worked harder, he should have more of each; but if worked but little, 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 the 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 nor drive a horse after he refuses his food, after drinking, until you have given him rest.

14th. Do not feed nor water a horse directly after coming in very warm, but walk him 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 cool give him his grain.

HIP-JOINT LAMENESS. This disease is generally seen in young horses and may be caused by rheumatism or some accident. Although it is due many times 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 a week 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 and allow a week's rest after stopping its use.

INFLAMMATION OF STOMACH. *Caused* generally by some poison given to improve the coat of the animal. Some persons are in a habit of giving powders which are 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 it is in 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 two ozs. tincture of opium, and one and a half ozs. sulphuric ether, two ozs. magnesia in one quart of cold gruel or milk, and repeat if necessary.

If corrosive sublimate is known to be the poison, give 15 or 20 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, &c. 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 20 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.

Then give the following: powdered gentian, four ounces, powdered fenugreek, four ounces, and powdered licorice root two 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 many times 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 from weakness.

Treatment. Give the strengthening powders recommended for 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 another, but when it is seen it is always the result

SUFFERING FROM ACUTE INFLAMMATION OF THE STOMACH.

SYMPTOMS OF DISEASES OF THE URINARY ORGANS.

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 linseed oil or other physic, as for inflammation of kidneys.

Inflammation of the Kidneys, is caused by bad 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 he straddles apart when he walks, as shown in the engraving above; looks anxiously around to his flanks; urine scanty and high colored, and sometimes bloody. The horse seldom lies down and almost refuses to move about, and crouches beneath pressure, when made over the kidneys, as shown in the engraving. Sometimes confounded with colic, which see.

of some disorder of the kidneys.
Gravel. Calculi, stony or gritty matter, formed in the kidneys, which passes off in the urine. Causes some irregularity in making water.

Treatment. Give 35 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 give flax seed tea to drink, which will soothe the parts. When old horses are troubled with kidney disease they can be helped a great deal by giving soft feed, such as boiled or steamed feed, and flaxseed tea, plenty of good cold water to drink at all times and cut grass.

Inflammation of the bladder. Symptoms almost the same as those of in-

TEST FOR INFLAMMATION OF THE KIDNEYS.

Treatment. Do not give any diuretics, as they will do more harm than good. Hot fomentations over the kidneys, and change the cloths often. In the first stage, give twenty to forty-five grs. of powdered opium, and fifteen grs. 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, many times, will 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 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 lop, 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 in heat, cold or moisture; an animal not accustomed to work, or 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.

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, as it 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 kept from the horse for a few days and then given in small quantities at first, 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.

POSITION ASSUMED IN THE LAST
STAGE OF PNEUMONIA.

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 breathing is not so quick and short as in inflammation of the lungs.

Causes. Broken ribs or wounds and other causes similar to those causing 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 same as for glanders and should be supported if necessary by giving raw eggs, tonics and stimulants, &c.

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 disease.)

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 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, 50 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 suppurating, corn, &c.

Symptoms. The horse is very lame on account of the inflammation before suppuration takes place, which 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 stop the inflammation 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 oz., to water, one quart.

Poultices of flax-seed meal are sometimes very useful.

RHEUMATISM. In acute rheumatism there is great excitement and fever with severe pain in the legs and joints. The 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. Has no unnatural heat in the feet as in founder.

Cause. Exposure to a draft of cold air when a horse has been heated and 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 soda, four ozs., sulphur, eight ozs., saltpetre powdered, four ozs., 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 many times 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 down to the skin well and continued for several weeks if it should be necessary to continue as long. The Spavin Cure used twice a day is also the *best external remedy* we know of for this disease in man; but should be used for some time, as this 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 one to three or four weeks.

RING-BONE. (For position see plate of skeleton.) Ring-bone is the result, usually, of a weakness, hereditary predisposition, or from a peculiar formation of the pastern joints which makes them poorly adapted to hard work; and therefore a provisional callous (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 many times 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

RING-BONE.

1. The joint between the pastern bones.

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

that the following 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 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 best to apply soft soap once in four to ten days to soak up the scab, then clean off and apply the 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 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 on many cases alone (not only for ring-bone but also for spavins, curbs &c.) and is particularly of great value in connection with the Spavin Cure for old and bad cases which do not seem to yield from the use of the Spavin Cure alone.

(Where the Kendall's Blister cannot be had of the agent, send \$1. to B. J. Kendall, Enosburgh Falls, Vt., and we will send a box by return mail.) Give the horse a rest of a few weeks after the cure seems to be completed.

SADDLE GALLS are sores produced by the saddle or any part of the harness.

Treatment. The cause should be removed by attending to the saddle or other part of the harness and fixing so as to remove the pressure. Kendall's Spavin Cure is used with excellent success for all such sores by applying a small quantity twice a day. If the Spavin Cure cannot be obtained, get at a drug store Laudanum two ozs. Tannin two drachms and mix and apply twice a day.

SCRATCHES. An inflammation of the skin of the heel of a horse, the first appearance of which is usually a dry and scurvy state of the skin of the heel, with redness, heat, and itching, (See grease.)

Treatment. Wash the affected parts clean with castile soap and warm soft water and dry, then use glycerine, eight ozs., carbolic acid 1 drachm; mix, and apply twice a day, washing as above when necessary to keep the parts clean. Also see treatment for grease.

It has been reported to us that Kendall's Spavin Cure, applied twice a day after washing as above, has worked nicely. It is well usually to give condition powders: saltpetre four ozs., sulphur eight ozs., copperas four ozs., fenugreek twelve ozs., gentian four ozs., mix; and give a table-spoonful twice a day.

SHOULDER LAMENESS. This is common among young horses when plowing in the furrow or from a slip sideways of horses of all ages. Horses in cities are especially liable to this difficulty. The muscles of the shoulder and sometimes the shoulder joint is involved.

Symptoms. Heat, tenderness, and sometimes swelling of the parts. It is sometimes difficult to ascertain the exact location of the lameness but by making a thorough examination of all parts and finding no lameness, heat, or tenderness in other parts, it will be quite certain that the difficulty is located in the shoulder, especially if found hot and tender. The horse steps shorter with the sound leg than with the lame one, which he drags along. In nearly all diseases in the foot the horse stretches the leg out straight forward, but in shoulder lameness it will be carried out more from the body.

Treatment. The horse should have entire rest, and the shoulder should have cold water cloths applied to it for two or three days and changed frequently. As soon as the heat has been reduced the cold water cloths may be left off and Kendall's Spavin Cure applied twice a day for a few days or until the lameness subsides. In some cases the Kendall's Blister would work admirably.

In applying the Blister place it where the friction from the collar will not affect it. Allow the horse a rest of two or three weeks after the cure seems to be complete and treatment stopped.

SHOULDER-JOINT LAMENESS. This difficulty being located in the joint is much more serious than the shoulder lameness just described, and more difficult to effect a perfect cure.

Symptoms. The animal drags the leg, with the toe on the ground, and throws the leg out in attempting to move it. It is with great difficulty that he can raise his foot.

Treatment. If the treatment is not put off too long a cure may reasonably be expected, if the following directions are followed. This disease

DRAGGING THE FORWARD FOOT
AN INDICATION OF SHOULDER
LAMENESS.

being similar to a spavin in the hock-joint should have similar treatment. If the part is very hot reduce the temperature by cold cloths as recommended for shoulder lameness or perhaps hot fomentations may work well instead of the cold—then apply Kendall's Spavin Cure two or three times a day as directed for spavin. If after one bottle of Spavin Cure has been used, the case does not improve as fast as is thought it should, use Kendall's Blister as recommended for ring-bone and follow it with the Spavin Cure as before. (See also treatment of spavin.)

Give the horse a good bedding with dry sawdust or some soft bed for his front feet to stand on, as he will be liable to stamp on the floor with his foot, and in this way you will avoid the concussion to the shoulder.

SIDE BONES. This is a species of ring-bone. The side cartilages of the joint become ossified but do not extend around as in ring-bone. The treatment should be the same as for ring-bone.

SKIN DISEASES. There are many different varieties of skin diseases and yet many seem to be produced by the same causes but present different appearances in different horses.

BALDNESS. This is produced by faulty digestion sometimes when small pimples appear in abundance and contain a fluid. In this form turn the horse to grass or give soft feed.

If caused by blisters, burns, &c., if the true skin has not been destroyed apply three or four times a week the following mixture. Glycerine, four ozs., tincture of cantharides, two ozs., mix.

Some cases do well by using the following—iodine, one drachm, lard, two ozs. mix and rub down to the skin twice a week.

MANGE, ITCH &C. These are contagious diseases caused by an insect burrowing in the skin.

THE MANGE INSECT.

Symptoms. The horse rubs himself against anything he can get at. Small pimples are seen about the head and neck and under the mane.

The hair falls off and leaves the skin exposed with red colored points and fissures and the skin becomes dry and bald and accompanied with great itching.

Treatment. Give the horse a good scrubbing with a coarse brush and then wash well with castile soap and soft water and dry carefully. As soon as the horse is thoroughly dried apply an ointment made as follows: sulphur, four ozs., lard, ten ozs., carbolic acid, $\frac{1}{2}$ oz.; mix.

SYMPTOMS OF MANGE.

This disease being contagious, persons should be careful to have everything used about the horse thoroughly cleansed and subjected to great heat by steaming or boiling, to destroy the insect which is the cause of the disease. It would be well to apply some of the ointment given above to parts of the stall, rubbing-posts &c.

SORES. Of the great variety of sores many are

what might be termed healthy sores while others become unhealthy. The former are best treated with tincture of opium, two ozs., tannin one drachm; mix and apply a small quantity two or three times a day. The unhealthy sore is best treated by cleansing the sore and applying Kendall's Spavin Cure twice a day. In some cases where there is proud flesh, cauterize the part with nitrate of silver or blue vitriol and, after a few hours, apply the Spavin Cure.

The Spavin Cure has given entire satisfaction whenever used, to our knowledge, for healthy or unhealthy sores, on *man* or *beast*. It should be used by applying a small quantity directly into the sore after it has been cleansed.

SPAVIN. (*For location see plate of skeleton.*) In nearly all cases of lameness in the hind leg the seat of disease will be found to be in the hock joint, although many persons (not having had experience) locate the difficulty in the hip, simply because they cannot detect any swelling of the hock-joint, but in many of the worst cases there is not seen any swelling or enlargement for a long time and perhaps never.

BONE SPAVIN is a growth of irregular bony matter from the bones of

BONE SPAVIN.

the joint, and situated on the inside, and in front of the joint.

Cause. The causes of spavins are quite numerous, but usually they are sprains, blows, hard work, and in fact, any cause exciting inflammation of this part of the joint. Hereditary predisposition in horses is a frequent cause.

Symptoms. The symptoms vary in different cases. In some horses the lameness comes on very gradually, while in others, it comes on more rapidly.

It is usually five to eight weeks before any enlargement appears.

There is marked lameness when the horse starts out, but he usually gets over it after driving a short distance, and if allowed to stand for a while will start lame again.

There is sometimes a reflected action, causing a little difference in the appearance over the hip joint, and if no enlargement has made its appearance a person not having had experience is very liable to be deceived in regard to the true location of the difficulty. The horse will stand on either leg in resting in the stable, but when he is resting the lame leg, he stands on the toe.

Natural action.
Leg brought forward.

Effect of a bad Spavin-
in- Leg not brought forward.

If the joint becomes consolidated the horse will be stiff in the leg but may not have much pain.

Treatment. That we may not be misunderstood in regard to what we mean by a *cure*, we would say that we mean to stop the lameness, and in most cases to remove the bunch on such cases as are not past any reasonable hopes of a cure.

But *we do not mean* to be understood that in a case of ankylosis (stiff-joint) we can again restore the joint to its original condition; for this is an impossibility, owing to the union of the two bones making them as one. Neither do we mean that, in any ordinary case of bone spavin which has become completely ossified (that is the bunch become solid bone)—that in such a case the enlargement will be removed.

In any bony growths such as spavin or ring-bone it will be exceedingly difficult to determine just when there is a sufficient deposit of phosphate of lime so that it is completely ossified; for the reason that in some cases the lime is deposited faster than in others and therefore one case

may be completely ossified in a few months while in another it will be as many years.

It is the cases which are not completely ossified which we claim to remove. One of this class which we have seen removed was a large bone spavin of four or five years standing and we think that a large per cent. of cases are not fully ossified for several months or years.

We are well aware that many good horse-men say that it is impossible to cure spavins, and in fact this has been the experience of horse-men until the discovery of Kendall's Spavin Cure. It is now known that the treatment which we recommend here will cure nearly every case of bone spavin, which is not past any reasonable hopes of a cure, if the directions are followed, and the horse used properly.

In using Kendall's Spavin Cure apply it two or three times a day until the lameness has all subsided and then gradually decrease the quantity used or only apply once or twice a day.

If it is necessary to use the horse much, only apply at night. When the enlargement has been removed the medicine may be left off, and the horse should have several weeks' rest. Although some horses can be put at light work as soon as the cure is complete, yet we would recommend that all be allowed to rest for several weeks when it can be done.

Some have had an erroneous idea in thinking that by using a bottle of the Spavin Cure it made no difference about the time in which they were applying it, and therefore have used the whole of a bottle in two or three days and as they saw no perceptible change would discard the medicine before it had had time to take any effect—to such we would say, only a little will be absorbed and the remainder goes to waste; therefore apply it over just the size of the spavin and enough to wet it well for two or three times at each application and rub it well each time down to the skin with a small swab or the finger until it has been absorbed, and repeat this two or three times a day and *continue using the medicine* until the cure is complete, which takes usually from two to eight weeks, or longer, according to the age and condition of the spavin; and much also depends upon how the horse is used.

In some very bad and old cases, if the lameness does not subside after using one bottle of the Spavin Cure it would be well to apply Kendall's Blister as directed on box, and follow up with the Spavin Cure for two or three weeks, and repeat the Blister if necessary. This Blister is not, like some we have seen, so powerful as to destroy the skin and other tissues; yet it is very well adapted, when used with the Spavin Cure, to the treatment of old and bad cases which do not seem to yield with the Spavin Cure alone. (We will send our Blister by mail to any address on receipt of price, \$1.)

After a few days use of the Spavin Cure a thick, firm scab is usually formed, and if pulled off will take the hair with it; yet it does not affect the growth of the hair. The better way is to apply soft soap to soften up the scab and in 2 or 3 hours wash well and when dry apply again, as before. (See testimonials and other information in another part of this book.)

We give no other treatment, as our experience with various other remedies including blisters, liniments, &c., has been *very unsatisfactory* as has been the experience of horsemen all over the world; but Kendall's Spavin Cure, when properly used, has given *entire satisfaction*. See "*our experience with bone spavin*" the back part of this book.)

OCCULT SPAVIN. This is similar to bone spavin in its nature, the difference being that the location is within the joint, so that no enlargement is seen, which makes it more difficult to come to a definite conclusion as to its location, and consequently the horse is many times blistered and tormented in nearly all parts of the leg but the right place.

The causes and effects are the same as in bone spavin and should be treated the same.

These cases are often mistaken for hip disease, because no enlargement can be seen.

BOG SPAVIN. The location of this kind of spavin is more in front of the hock-joint than bone spavin, and is a soft and yet firm swelling. It does not generally cause lameness.

Treatment. Use Kendall's Spavin Cure as directed for bone spavin, and, if the enlargement is not removed in two or four weeks, apply Kendall's Blister as directed for bone spavin, and continue the Spavin Cure.

BLOOD SPAVIN. This is similar to bog spavin but more extended, and generally involves the front, inside and outside of joint, giving it a rounded appearance. The swelling is soft and fluctuating. Young horses and colts are more liable to have this form of spavin than older horses, especially if driven or worked hard.

Treatment. For this form of spavin (especially bad cases) we would recommend our Blister to be applied every two weeks for a few times and the Spavin Cure to be used between times of blistering as recommended on box. Rub well, with the hand, often.

SPLINT. This is a small bony enlargement, and generally situated on the inside of the fore-leg, about 3 or 4 inches below the knee joint, and occurs frequently in young horses when they are worked too hard.

Treatment should be the same as for bone spavin, which see.

BLOOD SPAVIN

1. A Splint near the knee.
2. A low splint.
3. A small bony growth on the front of the leg, also called Splint.

SPRAIN. By this is meant the sudden shifting of a joint farther than is natural, but not so as to produce dislocation. Every joint is liable to sprain by the horse falling, slipping, or being over worked. These cases cause a great deal of trouble, many times producing lameness, pain, swelling, tenderness and an unusual amount of heat in the part.

Treatment. Entire rest should be given the horse and if the part is found hot, as is usually the case, apply cold water cloths, changing frequently for from one to three days until the heat has subsided, when apply Kendall's Spavin Cure in small quantities twice or three times a day, rubbing well with the hand.

If the fever is considerable, it might be well to give 15 drops of tincture of aconite root, three times a day for one or two days, while the cold water cloths are being applied. Allow the horse a rest of a few weeks especially in bad cases, as it is very difficult to cure some of these cases, if the horse is not allowed to rest.

STAGGERS. A disease of horses resulting from some lesion of the brain, which causes a loss of control of voluntary motion. Horses subject to these attacks should not be over fed, as it generally occurs in fat horses which are well fed. The cause is an undue amount of blood flowing to the brain.

Treatment. The treatment should be to remove the cause. In ordinary cases give half a pound of epsom salts, and repeat if necessary to have it physic, and be careful about over feeding.

In mad staggers it would be well to bleed from the neck in addition to giving the epsom salts.

STIFLE-JOINT LAMENESS. This is not of very common occurrence, but occurs occasionally in colts kept on uneven ground which induces dislocation of the stifle, or patella, which slips off the rounded heads of the bones when the horse steps.

It occurs in horses sometimes, which are kept on bad food and are constitutionally weak.

Symptoms. The horse stops suddenly and extends one of the hind legs backwards. The pastern is flexed and the head raised, as shown in the engraving, and a swelling upon the outer side with great pain. It sometimes occurs in colts, on the slightest cause.

Treatment. Any flurry may restore the bone to its proper place in colts, but for cases which do not become replaced in colts or horses, get into a shed and fix a rope to the pastern as shown in the

PATELLA, OR WHIRLBONE
DISPLACED.

engraving, and throw the other end over a beam and while one person pulls the leg upward and forward, another should stand by the quarters and push the dislocated patella inward with both hands. Feed well and give the horse 5 or 6 weeks' rest, or place the horse in a level pasture, and have him shod with a piece of iron projecting from the toe, especially if the toe has been worn off. If the horse should be lame, apply Kendall's Spavin Cure over the stifle, as directed for spavin.

THE MANNER OF REPLACING THE PATELLA.

SWEENEY. (*Atrophy.*) This is a wasting away of the muscles of the shoulder and said to be caused by some disease in the foot or leg.

Treatment. Treat any disease found in the foot or leg as directed in other parts of this book. Apply to the shoulder soft soap with a little salt added, four or five times a week and rub well.

THOROUGHPIN. An affection accompanying blood spavin, and generally caused by excessive labor.

Symptoms. A round tumor going through the leg and appearing on the outside and in front of the joint of the hock. Thoroughpin is the same disease as blood spavin on a more extensive scale causing the enlargement to extend through the joint from one side to the other.

Treatment. Same as for blood spavin which see.

TUMORS are swellings or enlargements of any part of the body. Tumors vary according to their situation and nature.

Treatment. The treatment varies with different horsemen. And, we would say that with many it might be best to have them cut out and yet there are many cases which can be removed by the use of Kendall's Spavin Cure applied as directed for spavin. We now have in mind a case of a *bony tumor* which had been sawed off by a surgeon and from some cause continued to grow; after it had again reached quite a large size the owner of the horse began to use Kendall's Spavin Cure, and after he had used one or two bottles, told us that the tumor was nearly removed and on examination we found it quite difficult to detect it.

WATER FARCY is the result of weakness in the old, and of inflammatory action in the young. By long continued labor, from twelve to

eighteen hours each day, the horse already debilitated is by abuse made a fit subject for water farcy.

It is the custom of some to feed largely on Saturday night and not to visit again until Monday morning, when they are liable to find the animal, so cruelly treated, with one swollen leg. The horse holds the leg up as seen in the engraving and will generally be lame. The animal is in too much pain and is too tired to eat, but will be very thirsty on account of the agonies which his cruel treatment has brought upon him.

THE DRIVER'S FIRST VISIT ON
MONDAY MORNING.

When water farcy occurs let it be understood that it is because the horse has been worked too long and too hardly and that if the animal is not better cared for *Farcy* will be the result.

Treatment. Let the work be lighter, the nourishment sufficient and of better quality, the stable kept clean and well ventilated. Lead the horse out two or three times a day for gentle exercise. As soon as the limb will bear friction let it be *well rubbed with the hands* and this repeated often. Bathe with cold water and rub dry. If the lameness and swelling continue take two parts of alcohol and one of Kendall's Spavin Cure, mix, and bathe the leg with the mixture, and rub well. Then take iodide of potassium, one drachm, pulv. gentian, one drachm, pulv. ginger, one drachm, sulphate of iron, one drachm, linseed meal, two ozs.

Make into a ball and give at one dose repeating every day for several days.

Prepare the above balls as they are wanted each day as the iodide of potassium should be kept in a vial until it is wanted for use. Always begin the treatment as soon as possible.

WIND GALLS. Soft swellings or enlargements just above the fetlock joints, which are caused by over-exertion or sprains. They are of a similar nature to blood spavin and may be treated the same; or place exactly on the wind galls pieces of cork covered with cloth large enough to press them down, and wet with the Spavin Cure, and keep the corks pressed on the galls by a rubber bandage to keep up the pressure, only removing when the horse is used and to wet the compress.

Apply only a little of the Spavin Cure to the compress and be careful not to have it so tight as to cause strangulation of the leg but have it as tight as can be and not cause strangulation.

WORMS. There are several kinds of worms which infest the horse

The horse rubs his nose violently against a wall when there is irritation from worms.

Gentle work is always better for the mare than to remain without work.

Symptoms. When tape-worm is present there is checked development, large abdomen, large head, long legs, ravenous appetite, unhealthy coat, body thin, fetid breath. The colt picks and bites its own hair, rubs its nose against a wall, or strains it violently upwards.

Treatment. Give spirits of turpentine. For a colt three months old give from one fourth to one half ounce; six months old one half to one ounce; one year, one to one and a half ounces; two years, one and one half to two ounces; four years, three to four ounces. Also procure one pound of quassia chips and pour three quarts of boiling water on to them —then mix a proportional dose of the quassia infusion with the turpentine and cause it to blend together by stirring well with yolks of eggs. Add twenty grains of powdered camphor gum and give the first thing in the morning.

Feed well afterward and give every morning until the coat is glossy; muriated tincture of iron, from one to ten drachms, according to age, and also Fowler's Solution from one fourth to three drachms.

LUMBRICI. Long round worms which are sometimes seen eighteen inches long. They prey upon the weakly, whether old or young.

Treatment. Give one drachm tartar emetic (worked into a ball with linseed meal and flour) every morning until the desired effect is accomplished. Or give calomel, three drachms, tartar emetic, one drachm; mix, and make into three balls to be given at night for three nights, and give, one day after the last ball, a good purging ball.

PIN WORMS. This variety of worms inhabits the rectum and causes great itching posteriorly which causes the horse to rub its hair off against the wall.

Treatment. Most medicines are deprived of their activity as they do not reach the rectum; therefore it is best to treat with injections which will come directly in contact with the parasites. Take one ounce catechu and a quart of water and when dissolved give as an injection and repeat for seven mornings. On the eighth day give a mash, at night follow with one half oz. aloes, and one drachm of calomel. Repeat the above if necessary. Injections of tobacco smoke work well.

some of which produce a vast amount of mischief.

TAENIA. (TAPE WORM.) These trouble the young mostly and are usually caused by starving the mare when with foal, and breeding from old animals. The dam and sire should be in perfect health if a valuable colt is desired.

YELLOW WATERS. This affection is the result of liver disease and has derived its name from the characteristic color of the membranes of the eyes, nose and mouth which have a peculiar yellowness that is caused by the liver's being diseased so that its natural functions are not properly performed and a large amount of bile is thrown back into the blood instead of being carried off in its natural way and only eliminated partially through the kidneys. It occurs more often in the horses which are highly fed and have nothing to do, than in any others.

Treatment. Give ginger, two drachms, powdered mandrake root, one drachm, powdered aloes, four drachms; mix, and give at one dose. Feed the horse with soft feed and grass to loosen the bowels. Repeat the above dose as often as shall be necessary, which, in most cases, perhaps, would be about every other day.

Owing to the difficulty in getting sketches made which will correctly illustrate the various positions in which the horse places himself in different diseases we have copied several from Mayhew and others.

Doses for the Horse.

NAME OF DRUG.	ACTION AND USE.	DOSE.	ANTIDOTE.
Arsenic.	{ Alterative and tonic, used for Paralysis, Mange, &c. }	1 to 5 grs.	Magnesia and oil.
Carbolic Acid.	Externally and Disinfectant.		Eggs; soap; gruel.
Tannic Acid.	Astringent.	20 to 40 grs.	
Alum.	Astringent.	2 to 3 drs.	
Aloes.	Laxative and Tonic.	1-2 to 1 oz.	
Ether.	Anti-spasmodic.	1-2 to 2 ozs.	
Anise Seed.	Aromatic and Stomachic.	1-2 to 2 ozs.	
Tartar Emetic.	Sedative and Alterative.	1-8 to 1-2 dr.	Tannic Acid.
Assafoetida.	Anti-Spasmodic, Coughs, &c.	1 to 3 drs.	
Bismuth.	For Chronic Diarrhoea, &c.	1-2 to 1 oz.	
Camphor.	Anti-Spasmodic.	1-2 to 1 dr.	
Cantharides.	Diuretic and Stimulant.	3 to 6 grs.	
Cayenne.	Stimulant and Carminative.	5 to 25 grs.	
Prepared Chalk.	Antacid.	1-2 to 1 oz.	
Blue Vitriol.	Astringent and Tonic.	1-2 to 1 dr.	Eggs, Milk &c.
Copperas.	Tonic and Astringent.	1/2 to 1 1/2 drs	
Digitalis leaf.	Sedative and Diuretic.	10 to 20 grs.	Stimulate.
Gentian Root.	Tonic.	1 to 2 drs.	
Calomel.	Cathartic.	10 to 40 grs.	Eggs and milk.
Aqua Ammonia.	Stimulant and Antacid.	1 to 4 drs.	Vinegar.
Fowler's Solution	{ Used for skin diseases. See Arsenic a preparation of. }	1 to 4 drs.	{ Hydrated peroxide of iron }
Solution of Lime.	{ Antacid, used as an antidote to poisoning by acids. }	4 to 6 ozs.	
Magnesia.	{ For colics as an antacid and laxative. }	1-4 to 1 oz.	
Epsom Salts.	Cathartic and febrifuge.	2 to 8 ozs.	
Nux Vomica.	{ Nervous stimulant—used for Paralysis. }	15 to 25 grs.	{ Saleratus followed quickly by copperas both dissolved in water. }
Linseed Oil.	Cathartic and Nutritive.	1 to 2 pts.	
Castor Oil.	Cathartic.	1-2 to 1 pt.	
Croton Oil.	Powerful purgative.	10 to 15 d'p's	Opium.
Opium.	{ Anodyne and Anti-spasmodic. Given in Colic, Inflammation of Bowels, Diarrhoea, &c. }	1-4 to 1 dr.	{ Belladonna, strong coffee, brandy & ammonia. Dash cold water on and keep the horse moving. }
Bicarbonate of Potash.	{ Diuretic and Antacid. Good for Rheumatism. }	3 to 5 drs.	{ Vinegar and Linseed Oil. }
Chlorate of Potash.	Diuretic. Given for bloating, &c.	1 to 2 drs.	
Saltpetre.	Diuretic & Febrifuge.	1 to 3 drs.	Linseed oil largely.
Iodide of Potassium.	{ Diuretic and Alterative. Used for Rheumatism, Dropsy, Enlarged Glands, &c. }	1-2 to 1 1-2 drs.	{ Give freely starch or flour, with water largely. }
Black Antimony.	Promotes the Secretions.	1-4 to 1/2 dr.	{ Infus'n of oak bark Give also lins'd oil. }
Quinine.	Tonic, given during convalescence.	15 to 50 grs.	
Soda Bicarb.	Similar to Bicarb, Potash.	3 to 8 drs.	
Glauber-Salts.	Cathartic.	6 to 12 ozs.	
Soda Sulphite.	{ Antiseptic and Alterative, used for blood diseases. }	1-2 to 1 oz.	
Sweet Spirits of nitre.	Diuretic and Diaphoretic.	1/2 to 1 1/2 ozs	
Spirits of Chloroform.	Anodyne and Anti-spasmodic.	1 to 2 ozs.	
Strychnia.	Tonic and Stimulant. Used for Paralysis.	1-2 to 1 gr.	Tobacco.
Sulphur.	{ Alterative and Laxative. Used for Skin diseases and Rheumatism. }	1-2 to 2 ozs.	
Tincture of Ac-onite Root.	Sedative. Used for lung fever &c.	15 to 35 d'p's	{ Give small doses of Nux vomica and stimulants largely and keep moving. }
Tincture of Cantharides.	Stimulant and Tonic.	1 to 2 ozs.	
Tincture Ergot.	Parturient.	1 to 2 ozs.	
Tincture Iron.	{ Tonic and Astringent. Used for typhoid diseases. }	1-2 to 1 oz.	

Tincture Iodine.	Used Externally.		
Tr. Nux Vomica.	{ Tonic Stimulant in Paralysis and dyspepsia.	2 to 4 drs.	See Nux Vomica.
Tincture Opium.	Anodyne and Anti-spasmodic.	1 to 2 ozs.	See Opium.
Mercurial Ointment.	{ Used for Mange, itch, lice and other parasites.		{ Whit's of eggs with milk given freely.
White Vitriol.	{ Astringent. Used for cuts, wounds and sores in solution.	5 to 15 grs.	{ Milk, eggs and flour.
Ginger.	{ Tonic, Stimulant and Stomachic. Used for flatulent colic, dys- pepsia, &c.	2 to 5 drs.	

For a colt one month old, give one twenty-fourth of the full dose for an adult horse as given above; three months old, one-twelfth; six months old, one-sixth; one year old, one-third; two years old, one-half; three years old, three-fourths.

IN MEASURING LIQUIDS

A table spoonful is equal to half an ounce by measure.

A desert-spoonful is equal to one-fourth ounce or two drachms.

A tea-spoonful is equal to one drachm.

A tea-cup is estimated to contain about four fluid ounces or a gill.

A wine glass about two fluid ounces.

The above named household implements vary in size and capacity so that usually it is difficult to measure with them accurately yet for nearly all medicines it will be near enough for all practical purposes, excepting some tea-cups are now made to hold six or eight ounces, so that if the medicine to be measured is poison it is well to give smaller doses if the exact capacity is not known. It is best for those having much use for measures to procure a glass graduate which will measure drachms and ounces.

THE AGE OF THE HORSE,

Determined by the appearance of the teeth.

The safest way of determining the age of a horse is by the appearance of the teeth which undergo certain changes in the course of years. Although it may be impossible to give any rules which will be found to be exactly correct in every case yet the following classification is generally correct; but exceptions will occur, as for instance: a noble horse may be taken for younger than he really is, because of the strong structure of all the bones make the teeth also stronger than those of a horse of an inferior breed, of the same age.

Eight to fourteen days after birth, the first middle nippers of the set of milk teeth are cut (Fig. 1); four to six weeks afterwards, the pair next to them (Fig. 2); and finally, after six or eight months, the last (Fig. 3).

All these milk teeth have a well-defined body, neck, and slender fang, and on their front surfaces grooves or furrows, which disappear from the middle nippers at the end of one year; from the next pair in two years; and from the incisive teeth (cutters) in three years.

At the age of two, the nippers become loose and fall out; in their places appear two permanent teeth, with deep, black cavities, and full sharp edges (Fig. 4).

At the age of three, the next pair (Fig. 5) fall out.

At four years old, the corner teeth fall out (Fig. 6.)

At five years old, the horse has his permanent set of teeth.

The teeth grow in length as the horse advances in years, but at the same time, his teeth are worn away, by use, about one-twelfth of an inch every year; so, that the black cavities of the center nippers below disappear in the sixth year (Fig. 7); those of the next pair in the seventh year (Fig. 8); and those of the corner teeth, in the eighth year (Fig. 9). Also the outer corner teeth of upper and lower jaw just meet at eight years of age.

At nine years old, cups leave the two center nippers above, and each of the two upper corner teeth has a little sharp protrusion at the extreme outer corners, (Fig. 10.)

At the age of ten the cups disappear from the adjoining teeth.

At the age of eleven, the cups disappear from the corner teeth above, and are only indicated by brownish spots.

The oval form becomes broader, and changes, from the twelfth to the sixteenth year, more and more into a triangular form, and the teeth lose, finally, with the twentieth year, all regularity. There is nothing remaining in the teeth that can, afterwards, clearly show the age of the horse, or justify the most experienced examiner in giving a positive opinion.

The tusches or canine teeth, conical in shape, with a sharp point, and curved, are cut between the third and fourth year; their points become more and more rounded, until the ninth year, and after that, more and more dull in the course of years, and lose, finally, all regular shape. Mares have, frequently, no tusks, or only very faintly indicated.

BREEDING.

This very important subject is too often neglected. In breeding, a common mistake is often made, that mares are bred from after they become useless for work, regardless of hereditary diseases which may be transmitted to their offspring. It should be remembered that one of the characteristic laws of life is the reproduction in kind,—“like begets like.”

Both parents should be selected with reference to their individual points of excellence and also that the points of one are adapted to the points of the other, although both may be excellent individually the points which characterize one may actually counteract those of the other; but if defects exist the breeder should be sure that it is merely accidental and not natural.

None but sound parents should be bred from (accidents of course are not to be regarded as unsoundness). Both parents should be free from any infirmity relative to a vicious temper, or bad disposition although the points of excellence in one may sometimes counteract the points in the other relative to that defect. Great care should be exercised that the same defect does not exist in both.

Some knowledge of the parentage of the sire and dam is therefore indispensable.

For ordinary business purposes the best form of a mare to breed from is a short-legged beast, with a deep and roomy chest, wide hips, and so built in every way as to indicate a robust animal with a strong constitution. Always avoid, when possible, selecting a mare for breeding purposes which has ringbone, spavin or any disease which will render the offspring liable to be afflicted with the same by hereditary descent.

The “breed” should be taken into consideration also. If it is desired to raise a carriage beast select a mare with a good, animated countenance, sprightly, not too nervous nor too sluggish, but with a general muscular structure. The head of the brood-mare is a point which should be always regarded for a mare that has a large head, with a dull, stupid countenance, will not breed a good foal, unless it might be from a very sprightly, ambitious horse. The shoulder blade should be wide and long, extending nearly to the top of the withers, and so well covered with muscle as not to present any undue prominence.

The neck should come out from the top of the withers and not low down; the fore-leg should be perpendicular so that the point of the

shoulder and the toe will be in a right line; the foot should be sound and of good, symmetrical shape.

The hips should be long, oval and broad; the hock joint should be well formed and not of the "cow-hock" or "sickle-hock" kind.

In selecting a stallion the rules which we have already given should be observed, remembering that compactness is quite essential, so that much goodness and strength are condensed into a small space. The shoulder should be well back, with the shoulder blade lying obliquely, but when it is desired to raise a slow, draught-horse a large stallion should be selected with upright shoulders.

In summing up the whole matter we would say, If you would be successful in breeding do not breed into the same family and blood, but select a horse of different blood unless it should be eight or ten generations removed.

Avoid using a horse which is defective in any particular, when the mare has the same defect, but select one as near perfect as possible in that point, Do not breed small mares with very large horses for there should be mutual adaptation in size and form as we have before stated.

SHOEING.

With a poor hoof an otherwise valuable horse becomes almost worthless, so that the common saying, "no foot, no horse," is practically correct; for this reason, the subject of *horse shoeing* is one which should receive much attention, as it is by poor shoeing that so many horses are rendered almost valueless for life.

For want of space we can only give some of the more important points which should be observed in shoeing, in order to preserve the hoof in a natural and healthy condition.

The hoof in the natural state, is adapted only to a grassy surface; so that when we wish to bring the horse into practical use upon our hard and stony roads, it becomes necessary to protect the hoof, by shoeing, from the unnatural wear and tear which it is subjected to.

It is greatly to be regretted that so large a share of the men who are permitted to do this very important work, of shoeing the horse, are so ignorant of the nature and structure of the foot and the principal rules which *should* guide them in doing this very important branch of work.

It is a great fault of nearly all shoers that they cut and pare with the idea of improving the foot, when their aim should be mainly to let nature have its course as much as possible or, in other words, to imitate the natural condition of the foot and only pare away such parts as have become useless. The shoe should always be fitted to the foot and not the foot to the shoe as is too often practised. That part of the hoof which should not have pressure, is the portion between the bar and quarter, commonly known as the seat of corns. (For location, see engraving on 9th page.)

The greatest pressure should be around the outside of the foot for about half an inch.

The frog should be allowed to come to the ground, which will prevent, to a certain extent, the concussion which would otherwise take place. *The frog should not be cut down*, as is frequently practised, nor should it be touched when healthy, except to keep it clean.

In paring the foot, be very careful not to cut down the outside, so as to allow the entire weight to rest on the inside of the shoe upon the sole; but only cut away the dead portion of horn on the sole, and cut down the wall from heel to toe until the bearing is natural, leaving it even and as near its natural state as possible. A red hot shoe should not be allowed to be burned into the foot to fit it.

The shoe to be selected should depend upon the condition of the foot and the condition of the roads, &c. The flat shoe, when properly applied, leaves the foot nearest its natural shape, by allowing the horse a good, even foundation to stand upon, and is most likely to give satisfaction for all ordinary purposes. At some seasons of the year it will be necessary to have calks upon the shoes, but ordinarily the foot should be allowed to come as near the ground as possible.

What we mean by the *flat shoe*, is one flat upon its superior surface that comes in direct contact with the hoof, the under surface being partially concave, so as to assist the horse in grasping the ground, to prevent slipping and to assist in progressing.

The shoe should be as big as the foot so as not to require any cutting down the hoof to make it fit the shoe, and the heels of the shoe should not be permitted to project backwards beyond the heel of the hoof more than about $\frac{1}{2}$ of an inch.

The outward margin of the shoe should just correspond with the shape of the foot, except at the heel, where the shoe should be a little wider from quarter to heel, especially on the outside.

Many persons are not aware of the thinness of the hoof, which makes it quite necessary that the nail holes should be near the edge, and quite well forward in the toe, so as to avoid driving the nails into the quick, which would cause serious lameness and injury.

Do not rasp under the nail clinches, nor over them; and do not use the rasp at all on the outside of the hoof, not even below the clinches, except just enough near the shoe to round the edge, and do not cut down the hoof if you have used a shoe which is too small.

MISCELLANEOUS RECEIPTS.

For Colic.

(See treatment of Colic.)

No. 1. Take of laudanum, 1 ounce, spirits of turpentine, 1½ ounces, mix, and give to one dose in three times the amount of warm water.

No. 2. Sulphuric ether, 1½ ounces, laudanum, 1 ounce, essence peppermint, 2 ounces, water, 16 ounces, mix, and shake well before giving.

For Heaves.

(See treatment of Heaves.)

No. 1. One teaspoonful of lobelia, given in the feed once a day, for a week, and then once or twice a week will stop them for a time.

No. 2. Balsam copaiba, 1 oz., spts. of turpentine, 2 oz., balsam fir. 1 oz., cider vinegar, 16 oz., mix, and give a tablespoonful once a day.

No. 3. Saltpetre, 1 ounce, indigo, ½ ounce, rain water, four pints, mix, and give a pint twice a day

No. 4. Liquorice, elecampane, wild turnip, fenugreek, skunk-cabbage, lobelia, cayenne, and ginger equal parts of each, mix, and give a tablespoonful once or twice a day; if the horse refuses to eat it in feed, make into a ball and give.

Contracted Hoof or Sore Feet.

No. 1. Take equal parts of soft fat, yellow wax, linseed oil, Venice turpentine, and Norway tar; first melt the wax, then add the others, mixing thoroughly. Apply to the edge of the hair once a day.

No. 2. Benzine, 1 ounce, salts of nitre, 1 ounce, alcohol, 3 ounces, aqua ammonia, 2 ounces, Venice turpentine, 8 ounces. Mix, apply to the edge of the hair, and all over the hoof once a day, for ten days, then twice a week for a short time.

No. 3. Rosin, 4 ounces, lard, 8 ounces; heat them over a slow fire, then take off and add, po. verdigris, 1 ounce, stir well to prevent it running over; when partly cool, add spirits turpentine, 2 ounces. Apply to the hoof about one inch down from the hair.

Horse Liniments.

No. 1. Oil spike, oil origanum, oil hemlock, oil wormwood, aqua ammonia, camphor gum, of each 2 ounces, olive oil, 4 ounces, alcohol, one quart. Mix. This is an excellent liniment for man or beast.

No. 2. Oil origanum, oil amber, sweet oil, of each one ounce, oil spike, aqua ammonia, and oil of turpentine of each, two ounces. Mix.

No. 3. Linseed oil, 8 ounces, turpentine, 8 ounces, oil origanum, 4 ounces. Mix well. This is excellent for sprains and bruises, and as a general liniment is good.

No. 4. Oil spike, 1 ounce, oil origanum, 2 ounces, alcohol, 16 ounces. Good for lameness from almost any cause.

No. 5. Take equal parts, alcohol, chloroform, aqua ammonia, Jamacia rum and water. Mix.

For Scratches and Grease Heel.

No. 1. Balsam fir, 4 ounces, lard, 4 ounces. Stir with a gentle heat until thoroughly mixed. Wash the sores well with castile soap, and apply.

No. 2. Sugar of lead, 2 oz., borax, 1 oz., sweet oil, 6 oz., mix, and apply twice daily after washing with castile soap, and drying.

No. 3. Tincture of myrrh, 2 oz., glycerine, 4 oz., tincture of arnica, 2 oz. Mix thoroughly and apply two or three times a day, after cleansing as above with castile soap.

No. 4. Take $\frac{1}{2}$ oz., of powdered verdigris, and one pint rum, or proof spirits. Mix, and apply once or twice a day. This works nicely for grease heel or mud fever.

No. 5. Take of oxide of zinc, 1 drachm, lard, 1 ounce, powdered gum benzoin, ten grains, camphorated spirits, one drachm. Mix thoroughly and rub on twice a week. Do not wash after the first application.

Cuts, Wounds and Sores.

No. 1. Take of lard 4 ounces, beeswax, 4 ounces, rosin, 2 ounces, carbolic acid, $\frac{1}{4}$ ounces. Mix the three first and melt, then add the carbolic acid, stirring until cool. This is excellent for man, as well as beast.

No. 2. Tincture aloes, 1 ounce, tincture myrrh, $\frac{1}{2}$ ounce, tincture opium, $\frac{1}{2}$ ounce, water, four ounces, mix, and apply night and morning.

No. 3. Tincture opium, 2 ozs., tannin, $\frac{1}{4}$ oz. Mix.

No. 4. Carbolic acid, 1 oz., soft water, 1 quart. Mix.

Sweeney.

No. 1. Spanish flies, camphor gum, and cayenne of each, 1 oz. alcohol, 10 ozs., spts. turpentine, 6 ozs., oil origanum, 2 ozs. Mix.

No. 2. Alcohol, 16 ozs., spirits turpentine, 10 ozs., muriate of ammonia, 1 oz. Mix.

No. 3. Alcohol, water, spirits of turpentine and soft soap, of each, 1 pint, salt, 6 ozs. Mix.

Poll evil and Fistula.

No. 1. Copperas, 1 drachm, blue vitriol, 2 drachms, common salt, 2 drachms, white vitriol, 1 drachm, mix, and powder fine. Fill a goose-quill with the powder, and push it to the bottom of the pipe, having a stick in the top of the quill, so that you can push the powder out of the quill, leaving it at the bottom of the pipe; repeat again in about four days, and in two or three days from that time you can take hold of the pipe and remove it, without trouble.

No. 2. Tincture of opium 1 drachm, potash, 2 drachms, water, 1 ounce, mix, and when dissolved inject into the pipes with a small syringe, having cleansed the sore with soap-suds; repeat every two days until the pipes are completely destroyed.

No. 3. Take a small piece of lunar caustic, place in the pipe,

after being cleansed with soap suds, then fill the hole with sweet oil.

Bots.

Take new milk, 2 quarts, syrup, 1 quart, mix and give the whole and in fifteen or twenty minutes after, give 2 quarts of warm, strong sage tea, half an hour after the tea, give 1 quart of linseed oil, or if the oil cannot be had give lard instead.

Ointment for Horses.

Bees-wax, 2 ounces, rosin, 3 ounces, lard, 4 ounces, carbolic acid, 1 drachm, honey, $\frac{1}{2}$ ounce, melt all together and bring slowly to a boil, then remove from the fire, and add slowly, 1 gill of spirits of turpentine, stirring all the time until cool; used with good success for galls, cracked heels, flesh wounds or bruises.

Condition Powders.

No. 1. Gentian, fenugreek, sulphur, saltpetre, cream of tartar, of each 2 ounces, rosin, black antimony, of each 1 ounce, ginger, liquorice, 3 ounces, each, cayenne, 1 oz., pulverized and mixed thoroughly; dose, 1 tablespoonful, once or twice a day, mixed with the feed; used with good success for coughs, colds, distemper, hide-bound, and nearly all diseases for which Condition Powders are given.

No. 2. Fenugreek, 4 ozs., ginger, 6 ozs., anise, pulverized, 4 ozs., gentian, 2 ozs., black antimony, 2 ozs., hard wood ashes, 4 ozs.; mix all together; excellent to give a horse an appetite.

No. 3. Liquorice, 4 ozs., fenugreek, 4 ozs., elecampane, 4 ozs., blood root, 1 oz., tartar emetic, $\frac{1}{2}$ oz., ginger and cayenne, each, 1 oz., mix, and give a tablespoonful 2 or 3 times a day in the feed. One of the best condition powders for any cough, cold, distemper or epizootic: also excellent for heaves. For heaves, 1 oz. of lobelia and camphor may be added.

Liniments for Horses.

No. 1. Olive oil, 2 ozs., aqua ammonia, 1 oz., mix, and add 2 ozs. oil origanum, 2 ozs. spirits of turpentine, $\frac{1}{2}$ oz. oil of worm-wood, 1 pint strongest alcohol; mix. This liniment is excellent for

any lameness, also good for spavins, ringbones, curbs, etc., if used when they make the first appearance.

No. 2. Oil of spike, 1 oz., oil of origanum, 4 ozs., aqua ammonia, 2 ozs., tincture of cayenne pepper, 4 ozs., beef's gall, one gill, camphor gum, 1 oz., alcohol, 1 pint; mix: used for the same purposes as No. 1.

No. 3. Best vinegar, 1 qt., saltpetre, pulverized, 4 ozs. wormwood, 4 ozs.; mix, and steep in a dish well covered: strain and press the herbs: valuable for bruises, swellings and sprains.

Saddle and Harness Galls, Bruises, &c.

No. 1. Tincture of opium, 2 ozs., tannin, 2 drachms; mix, and apply twice a day.

No. 2. Take white lead and linseed oil, and mix as for paint, and apply two or three times a day; this is good for scratches, or any wounds on a horse.

Eyewater for Horses.

Sugar of lead, 1 drachm, tincture of opium, 2 drachms, soft water, 1 pint; mix, and wash the eye two or three times a day.

Founder.

No. 1. Vinegar, 3 pints, cayenne pepper, $\frac{1}{2}$ drachm, tincture of aconite root, 15 drops, mix, and boil down to 1 quart; when cool, give as a drench; blanket the horse well; after the horse has perspired for an hour or more, give one quart of linseed oil: this treatment will be found good for horses foundered by eating too much grain.

No. 2. Some recommend for horses foundered on grain, to bleed about 1 gallon, then to drench the horse with linseed oil, 1 quart; after this, rub the fore legs well, and for a long time with very warm water, with a little tincture of opium mixed with it. As the horse will not recover from loss of blood for a long time, it is usually better to adopt the treatment given in No. 1.

Anodyne Drenches.

No. 1. Tincture of opium, 1 ounce, starch gruel, 1 quart: mix.

No. 2. Sweet spirits of nitre, 1 oz., tincture of opium, 1 oz., essence of peppermint, $\frac{1}{4}$ oz., water, 1 pint; mix.

No. 3. Tincture of opium, 1 oz., spirits of camphor, $\frac{1}{2}$ ounce, anise, $\frac{1}{2}$ ounce, sulphuric ether, 1 oz., water, 1 pint; mix.

Diabetes.

Sugar of lead, 10 grains, alum, 30 grains, catechu, 1 dr., tincture of opium, $\frac{1}{2}$ ounce, water, 1 pint; mix.

Farcy and Glanders.

No. 1. Iodide of potassium, $1\frac{1}{4}$ drachms, copperas, $\frac{1}{2}$ drachm, ginger, 1 drachm, gentian, 2 drachms., powdered gum arabic and syrup to form a ball.

No. 2. Calomel, $\frac{1}{2}$ drachm, turpentine, $\frac{1}{2}$ ounce, blue vitriol, 1 drachm, gum arabic and syrup, to form a ball.

No. 3. $\frac{1}{2}$ ounce sulphite of soda, 5 grains Spanish flies, powdered; mix; and give at night in cut feed for several weeks; give at the same time every morning and noon, 3 drachms powdered gentian, 2 drachms powdered blue vitriol; give the medicines for a long time; feed well. This is the best treatment that can be given for this disease.

Fever Balls.

No. 1. Saltpetre, $2\frac{1}{2}$ drachms, tartar emetic, $\frac{1}{2}$ drachm, flaxseed meal, 1 oz., camphor, $\frac{1}{2}$ drachm, ginger, 2 drachms; mix, and form into a ball; repeat three or four times a day if necessary.

No. 2. Tincture of aconite, ten drops, tartar emetic, $\frac{1}{4}$ drachm, saltpetre, 1 drachm, ginger, 2 drachms, linseed meal, 1 ounce; mix, and form into a ball; repeat three or four times a day if necessary.

Diuretic and Tonic Ball.

Copperas, $1\frac{1}{2}$ drachm, ginger, 1 drachm, gentian, 1 drachm, saltpetre, 3 drachms, rosin, $\frac{1}{2}$ oz., flaxseed meal, 1 oz; mix, and form into a ball.

Diuretic Balls.

No. 1. Saltpetre, 3 drachms, rosin, 4 drachms, castile soap, 2 drachms, fenugreek, 3 drachms, flaxseed meal, 1 ounce; mix, and form into a ball.

No. 2. Oil of juniper, $\frac{1}{2}$ drachm, rosin and saltpetre each, 2

Cordial Balls.

drachms, camphor, $\frac{1}{2}$ drachm, castile soap, 1 oz., flaxseed meal, 1 oz.; mix, and form into a ball.

No. 1. Anise, powdered, $\frac{1}{2}$ ounce, ginger, 1 drachm, gentian, 1 drachm, fenugreek, 2 drachms; mix.

No. 2. Caraway and ginger, each, 2 drachms, anise, gentian and fenugreek, each, 1 oz.; mix.

No. 3. Camphor, 1 drachm, anise, 3 drachms, tincture of opium, 1 oz., powdered extract of liquorice, 3 drachms, flaxseed meal, 1 ounce; mix.

Astringent and Cordial.

No. 1. Opium, 12 grains, camphor, $\frac{1}{2}$ drachm, catechu, 1 dr.; mix.

No. 2. Opium, 10 grains, camphor, 1 drachm, ginger, 2 drs., castile soap, 2 drachms, anise, 3 drs., liquorice, 2 drachms; mix.

Alterative and Laxative Balls.

No. 1. Linseed meal, 1 ounce, aloes, $\frac{1}{2}$ ounce, castile soap, $\frac{1}{2}$ ounce; mix.

No. 2. Ginger, 1 drachm, bar soap, 3 drachms, Barbadoes aloes pulverized, 6 drachms, flaxseed meal 1 ounce.

Tonic Ball.

Ginger, 2 drachms, gentian, 1 drachm, Peruvian bark, $\frac{1}{2}$ ounce, fenugreek, $\frac{1}{4}$ oz.; mix, and form a ball.

Diuretics.

Take of balsam copaiba, 2 ozs., sweet spirits of nitre, 3 ounces, spirits of turpentine, 2 ozs., oil of juniper, 2 ozs., tincture of camphor, 2 ozs.; mix; shake the bottle before pouring the medicine; dose for an adult horse, two tablespoonfuls in a pint of milk, repeated every four to six hours if necessary. This is a reliable preparation for kidney difficulties.

Cough Mixtures.

No. 1. Oil of tar, given as directed for the treatment of heaves, is one of the best remedies for nearly all coughs.

No. 2. Take of alcohol, $\frac{1}{2}$ pint, balsam of fir, 2 ounces; mix well, and add all the tar it will cut. Shake well before using. Dose from one to two teaspoonfuls two or three times a day.

Farcy.

Nitrate of potash, 4 ozs., black antimony, 2 ozs., sulphite of soda, 1 oz., elecampane, 2 ozs.; mix, dose, one tablespoonful once or twice a day.

Nasal Gleet.

Copperas, 2 ozs. pulverized gentian, 3 ozs. elecampane, 1 oz. linseed meal, 3 ozs.; mix, and give from $\frac{1}{2}$ to 1 tablespoonful twice a day.

No. 2—Aloes 6 ozs., pulverized nux vomica, 3 drachms, flaxseed meal, 4 ozs., make into eight powders and give one or two each day.

Cracked Heels.

Tar, 8 ozs., beeswax, 1 oz., rosin, 1 oz., alum, 1 oz., tallow, 1 oz., sulphate of iron, 1 oz., carbolic acid 1 drachm; mix, and boil over a slow fire. Skim off the filth, and add 2 ozs. of the scrapings of sweet elder.

Thrush.

No. 1. Wash the feet well, with castile soap and water, and sprinkle a small quantity of pulverized blue vitriol in the cleft and then fill up all the cavities with cotton and press it in so as to keep out all dirt and repeat as often as necessary until the cure is complete.

No. 2. Blue vitriol and copperas, of each one ounce, burnt alum, 2 ozs., white vitriol, $\frac{1}{4}$ oz.; mix.

Water Farcy.

No. 1. Saltpetre, 2 ozs., copperas, 2 ozs., ginger, 1 oz., fennugreek, 2 ozs., anise, $\frac{1}{2}$ oz., gentian, 1 oz.; mix and divide into eight powders; give two or three each day.

No. 2. Gentian, 1 oz., ginger, $\frac{1}{2}$ oz., anise, 1 oz., elecampane, 2 ozs., blue vitriol, 1 oz., flaxseed meal, 2 ozs., saltpetre, 2 ozs., mix,

and divide into eight powders. Moderate daily exercise and rubbing the limbs are useful.

Healing Preparations.

No. 1. Carbolic acid, 1 oz., soft water, 2 pts. ; mix.

No. 2. White vitriol, 1 oz., soft water, 2 pts. ; mix.

No. 3. Pulverized camphor, 1 drachm, prepared chalk, 6 drachms, burnt alum, 4 drachms ; mix. Sprinkle over the sore.

No. 4. Tincture of opium, 1 oz., tannin, 1 drachm ; mix and shake well before using. Excellent for galls of collar, saddle, or in fact for any purpose requiring a healing astringent.

For Galled Back or Shoulders.

Tincture of arnica, 1 oz., vinegar, 6 ozs., brandy, 4 ozs., sal ammoniac, 2 ozs., soft water, 1 pt. ; mix, and bathe with it often.

For Unhealthy Ulcers.

Nitric acid, 1 oz., blue vitriol, 3 ozs., soft water, fifteen ozs.

For Fresh Wounds.

Copperas, 2 drachms, white vitriol, 3 drachms, gunpowder, 2 drachms, boiling soft water, 2 qrts. ; mix ; when cool it is ready for use.

Healing Mixture.

Cosmoline, 5 ozs., carbolic acid, 1 drachm ; mix. This is one of the very best of mixtures for any sore, especially such cases as are inclined not to heal readily.

To Cure Mange.

Oil Tar, 1 oz., lac sulphur, $1\frac{1}{2}$ ozs., whale oil, 2 ozs. ; mix. Rub a little on the skin wherever the disease appears, and continue daily for a week and then wash off with castile soap and warm water.

Healing Mixture for Cuts.

Balsam copaiba, 2 ozs., tincture of myrrh, 3 ozs. ; mix. This is a good healing mixture.

Sore Lips.

The lips become sore frequently at the angles of the mouth, from bruising with the bit. They can be cured by applying the following mixture.

Tincture of myrrh, 2 ozs., tincture of aloes, 1 oz. and tincture of opium, $\frac{1}{2}$ oz., mix and apply three or four times a day.

For Sore Mouth and Lips.

Borax, 1 oz., Tannin, $\frac{1}{4}$ oz., Glycerine, 8 ozs., mix, and apply two or three times a day with a swab.

For Spavins, &c.

Hog's lard and spirits of turpentine; mix, and place in the hot sunshine for four or five days. Apply four or five times a week.

Eyewater.

White vitriol and saltpetre, of each one scruple, pure soft water, 8 ozs.; mix. This should be applied to the inflamed lids 3 or 4 times a day and if the inflammation does not lessen in 1 or 2 days it may be injected directly into the eye.

The writer has used this for his own eyes, reduced half with water and dropped directly into the eye, which would cause the eye to smart considerably for about five minutes when he would bathe the eye with cold water for a few minutes and by repeating this 3 or 4 times a day it has given the very best of satisfaction.

It does nicely many times to just close the eye and bathe the outside freely.

For Poll Evil, Fistula, or any Indolent Ulcer.

Fill the sore to the bottom with ashes from burnt corn cobs; repeat two or three times if necessary until a cure is effected.

For Colic.

Take of gum myrrh, 1 oz., gum camphor, 1 oz., powdered gum guaiac, 1 oz., cayenne, 1 oz., sassafras bark powdered, 1 oz., spirits turpentine, 1 oz., oil origanum, $\frac{1}{4}$ oz., oil hemlock, $\frac{1}{2}$ oz., pulverized opium, $\frac{1}{2}$ oz., strongest alcohol, 2 qrts; mix all together and shake often for eight or ten days and filter or strain through flannel.

nel. Dose from 1 to 3 tablespoonfuls, according to the severity of the case, given in a pint of milk.

We never have known the above remedy to fail of giving relief when given for colic, in horses. In many cases where it has been used it has given immediate relief when various other remedies had failed of giving any relief.

It makes one of the very best of Pain Killers for family use and we advise all to keep it on hand.

For Flesh Wounds.

To prevent inflammation or tendency to sloughing or mortification. Take 1 pound saltpetre, 2 gallons water, 3 pints proof spirits: mix, and inject into the wound with a syringe three times a day until it heals. In treating deep wounds or of a dangerous character, especially if the animal is inclined to be fat, give a dose of physic, feed bran, carrots, &c. No grain should be fed, grass is more desirable than hay. If grass is fed freely, physic is not necessary.

For Removing Enlargements &c.

Oil spike, 1 oz., camphor, 1 oz., oil origanum, 2 ozs., oil amber, 1 oz., spirits turpentine, 2 ozs. Rub on the mixture thoroughly two or three times a week.

For Bruises, Cuts &c., on Horse or Man.

Tincture arnica, 1 oz., sassafras oil, $\frac{1}{2}$ oz., laudanum, 1 oz.; mix. Shake well before using. Bandage lightly, and keep wet with the mixture.

Quarter Crack.

The best way to cure quarter crack is to open the heel on that side between bar and frog, cutting down pretty well, (not sufficient to cause bleeding,) until the quarter will give freely; then put on a shoe that will expand the heel. It is only necessary in this case that the inner heel should be opened or spread as the hoof is simply too small for the foot; if this is properly done the point is directly reached. Some recommend, in addition to this, burning with a hot iron a crease across at the upper edge of hoof. If this is

done properly the hoof will not split any more. The hoof may now be more rapidly grown if desired. Opening the foot and the shoe is the point of success.

Quittor.

Corrosive sublimate, $\frac{1}{4}$ oz., muriatic acid 20 drops, soft water, 2 ozs.; mix the two last and shake well, then add the first.

Inject a little with a glass syringe one or two times, being careful to inject to the bottom. Warm poultices generally work well, used for several days.

Bots.

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, 25 hours; decoction of tobacco, 11 hours; strong oil of vitriol, 2 hours 18 minutes; essential oil of mint, 2 hours 5 minutes. Were immersed without apparent injury, in spirits of camphor, 10 hours; fish oil, 49 hours; tincture aloes, 10 hours; in brine, 10 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 effect the bot, that will not destroy the coating of the stomach, and injure or kill the horse. No veterinary surgeon can tell the symptoms of bots from colic. In fact there is but little doubt, that ninety nine out of every one hundred cases of belly ache, is no more nor less than colic and not bots, and should be treated as we have already directed in the treatment of colic.

To Grow Hair.

Mix sweet oil, 1 pint, sulphur, 3 ozs. Shake well, and rub well into the dock twice a week.

For Worms.

Calomel, 1 drachm, tartar emetic, $\frac{1}{2}$ drachm, linseed meal, 1 oz., fenugreek, 1 oz. Mix and give in feed at night, and repeat the dose for two or three times and follow with $1\frac{1}{2}$ pints of linseed oil about 6 hours after the last powder has been given.

Grease Heel.

Chloride of zinc, $1\frac{1}{2}$ drachm, water, 10 ounces, glycerine, 8 ozs., mix. If there is much discharge, apply a poultice for several hours followed by application of the above after cleansing well with soft water and castile soap. The following powders should be given at the same time in the feed, every night for a week or two. Bicarbonate of soda, 1 ounce, arsenic, 1 drachm, iodide of iron, $\frac{1}{2}$ ounce, fenugreek, 2 ounces, ginger, 2 ounces, elecampane, 1 ounce, mix thoroughly and divide into 12 powders.

For Distemper.

Hops, 2 ounces, carbolic acid 30 drops, boiling water, 2 gallons. Mix the hops and carbolic acid with the boiling water and compel the animal to inhale the steam for 15 or 20 minutes at a time and repeat three times a day. Apply a strong mustard paste to the throat, and place a warm poultice over the paste. Feed warm mashes and boiled vegetables; keep stable comfortably warm and the air pure. Give the following powders once a day. Take powdered Peruvian bark, 2 ounces, powdered gentian, 1 ounce, powdered copperas, 1 ounce, mix and divide into 8 powders.

Thrush.

Take white vitriol, 2 ounces, soft water 8 ounces. Mix, and apply to the diseased surface, after the ragged parts have been cut away and thoroughly cleansed. Pack the cavities with cotton batting, so as to keep out all dirt.

For Ringworm.

Apply mercurial ointment 3 or 4 times a week.

For Brittle and Contracted Hoofs.

Take of castor oil, Barbadoes tar and soft soap, equal parts of each, melt all together and stir while cooling, and apply a little to the hoof 3 or 4 times a week.

TO HORSE OWNERS.

ALL must admit that we live in an age of improvements ; and that we enjoy what our forefathers never even dreamed of in the fast and easy transportation, rapid communication from continent to continent, and the use of the hundreds of labor saving machines ; and yet before or even when these great discoveries were first made known to the public how many there were (like Thomas) who doubted : but “ time will prove all things,” and so it has been with all these inventions which were once said to be impossibilities, for now we know them to be of the great value which their originators claimed them to be.

In the year 1875 it was claimed by the publisher of this book, that he had discovered a combination of remedies which would cure bone spavins and remove the enlargement without blistering or causing any sore. Like all other discoveries this too was scouted at when first announced to the public, and, as might naturally be expected, by those who knew most about the usual manner of treating this difficulty, and by those who had tried faithfully everything they could learn of ever being used, but only meeting with disappointment with each trial of the vaunted remedy. This class (being *horsemen*) knew that a bone spavin made an otherwise valuable horse of but little worth, for they knew how frequently the most powerful remedies had been used, such as blisters, which were so powerful as to destroy the tissues, and also the red hot iron, which was

worse if possible, and still the horse left as bad *or worse* than before anything had been used—therefore after so many disappointments of this kind it would be very natural for men having such an experience to say it was impossible to cure a spavin and remove the bunch, and to do it with a remedy so mild as not to blister. But, as we said before, time will prove all things, and so it has been with Kendall's Spavin Cure, and those who were the first to condemn it are now the loudest in its praise; (I mean those who were *horsemen*, and who knew that if a cure was to be accomplished there was something needed more than to simply make a few hasty and perhaps faulty applications, and therefore would use the Spavin Cure with patience, according to directions.)

The time was, in the practice of medicine, when about every patient was subjected to the rash treatment of bleeding and salivation from the indiscriminate use of calomel, but time has proved these plans of treatment to be more fruitful of damage than otherwise, so they have become among the things of the past. A similar reform is now taking place in the treatment of the horse, the most useful animal ever created; and horsemen are beginning to learn that a horse needs more humane treatment than he has received in the past, and that the cases are *very rare* which require the powerful remedies that have been in use; and I think we can safely say that those cases *never occur* which require the use of the red hot iron, and the men are very few that would allow this barbarous treatment to be practised upon their own person, and we ask why any man should allow the noble animal to be subjected to any treatment that he would not submit to upon his own person? Could the horse, like Balaam's animal, be for a moment endowed with the power of speech, he would say—do not subject me to any treatment which you consider too cruel for yourself; for we, like you, have been created with nerves of sensibility, so that pain is as hard for us to endure as for you, and therefore we ask that you will always have mercy upon us (as a merciful man should do) and consider before treating us (or neglecting to do so) whether it is doing just as you would be done by.

It might be of interest to some for us to state here how Kendall's Spavin Cure happened to be discovered.

OUR EXPERIENCE WITH BONE SPAVIN.

The proprietor having a horse which he prized, for her goodness and gentleness, and which in some way became spavined, was under the necessity of resorting to the popular remedies in use at that time, for the treatment of the spavin; after a few week's treatment the outlook seemed to be rather discouraging; but as we had had experience as a practising physician, and also the benefits of all the receipts which were said to be cures—having been in the drug business for several years, and filled the receipts from the various horsemen in our vicinity—we felt that our experience had been such that we were certainly equal to the task, if any one was, and so we continued, first with this liniment, and then with the other, until we had gone through with the whole catalogue of the (so called) “*sure cures.*” We took counsel of the various horsemen who were quite sure their receipt would be just *the* thing, but when informed that all this and more too had been used, we received but little consolation. As the horse was no better, and several weeks had elapsed since we began the treatment, our faith in the power of any remedy to even stop the lameness (say nothing of removing the enlargement) was very weak; but still we were finally persuaded that a thorough use of blisters might cure and it was our only hope, and we therefore proceeded to torment the poor animal, by applying blisters about every two weeks and giving the horse rest until six blisters had been applied, during which time the horse was allowed to remain (nearly all summer) in the barn, and as the horse was no better, that we could perceive, it will be easy for any one to imagine our feelings in regard to the power of *any remedy* to cure a bone spavin, and then we, like many others were very positive in our opinion that there was nothing which would cure a bone spavin, and finally stopped all treatment.

About six weeks after we had stopped all treatment, we decided to give the case another trial, for it seemed to us that there was something that would effect a cure if we could only get the right thing. Instead of using the remedies which everybody said were sure cures, we began to reason about the matter, and it occurred to us that if we had been treating a human being we should have treated him in a more humane manner, and therefore we compounded

a mixture which was entirely different from anything we had ever heard of being used, and again began to treat the horse, and, to our great surprise, in a short time (about two weeks), the lameness all subsided; and by continuing the treatment a while after the lameness had subsided the enlargement was entirely removed. I could hardly realize what a wonderful cure had finally been accomplished, but after preparing the same mixture for a great many cases without hearing of its failing to cure in a single case, I was then fully satisfied of the *great worth of this remedy to horse owners*, and began to put it up for the public; and since that time the cures which it has effected have been almost innumerable, and now those who are most capable of judging of its merits pronounce it to be the best remedy for the purposes for which it is prepared that they have ever known to be used.

We therefore offer the *Kendall's Spavin Cure* to the public with perfect confidence, believing that in nearly if not every case in which a man might *reasonably* expect a cure, if he uses the Spavin Cure thoroughly and patiently, according to the directions, he will effect a cure. By the words "thoroughly and patiently" used above we mean, to use as directed on bottle, by *rubbing down to the skin well*, as what remains on the hair has no effect, and by applying over the size of the whole of the enlargement; but there is no good reason for applying all over the leg because one desires to be thorough and cover the whole of the bunch, for what is applied to the space outside of the enlargement is only wasted—but we frequently find parties who apply it almost indiscriminately to the whole of the hock joint, when the space the size of a cent, perhaps, would be all that was necessary, and therefore the bottle of Spavin Cure is used, or rather wasted, in a very few days and the man finds his horse no better, and drops the use of the Cure, and perhaps condemns it, when he has not given it the slightest fair chance to effect a cure; By the word "patiently" we would be understood to mean, to apply it according to directions, for a long time, *if necessary*, for no difficulty of so serious a nature as Spavin is, can be removed by *any* remedy in only a few days; and if any man would stop to consider, he might know that it would be impossible. We might occupy many pages in relating our experience and in giving full directions for the use of

Kendall's Spavin Cure, but will not add more here except to say *use good common sense in applying it, and in the use of the horse.*

Please look over the following testimonials, many of which are from the most prominent gentlemen and horse owners in the country. Also see treatment given for bone spavin &c.

What some of our Agents say of it.

Office of C. M. Moseman & Bro., Manufacturers of and Dealers in Harness, Horse Clothing, &c.

128 Chambers St., NEW YORK CITY, Jan. 22d, 1878.

DR. B. J. KENDALL—Dear Sir:—We take great pleasure in stating to you that the sale of your Spavin Cure has been without exception, the most satisfactory of any horse liniment we have ever kept in our stock. We have sold it to many of the best horse men in our city and they all tell us freely that it does the work to their entire satisfaction. Capt. Rynders, owner of "Aberdeen," told us to-day it was worth \$5. per bottle and if it could not be got for less he would give it. Trusting that every horse owner will find out its good qualities, we are

Yours Truly,

C. M. MOSEMAN & BRO.

Office of Peter Hayden & Co., Nos. 45 & 47 LAKE ST. CHICAGO, ILL., Mar. 16th, 1878.

DR. B. J. KENDALL—Dear Sir:—As to your "Spavin Cure" we will most freely say that in our sales of same, we have ever found that it brings back the good words of the user, and we have letters on file, too many to re-write, that speak in the highest terms of your "Spavin Cure." We have no fear in always recommending it, with our experience and belief of its virtues.

Respectfully,

P. HAYDEN & Co.

P. Hayden, Wm. B. Hayden, C. H. Allen, Albert Hayden.

Office of A. V. Smith & Co., Manuf'rs and Dealers in fine Harness, Carriages &c.,
65 and 67 State St., ROCHESTER, N. Y., Jan. 30th, 1878.

DR. B. J. KENDALL—Dear Sir:—It is with pleasure that we state to you that the reports from the sales we have made of your Spavin Cure, both to the trade and to prominent horsemen, has been the most satisfactory of any remedy we ever sold or heard of, as they all tell us freely that it works to their entire satisfaction, and in nearly every case they come back for more, and in no instance have we heard anything but favorable reports.

Respectfully Yours,

A. V. SMITH & CO.

MILWAUKEE, WIS., Jan. 23, 1878.

DR. B. J. KENDALL, Enosburg Falls, Vt.—Dear Sir:—I have now been selling your "Spavin Cure" for about one year. I have not used it myself as I have not had any occasion, but the many who have bought and used it have—so far as I have heard from them—uniformly expressed satisfaction, several assuring me it is, if used according to the directions, "by far the best article they have ever used on horses," and have repeated their orders for it.

Yours Respectfully,

GEO. DYER.

Wholesale Saddlery Dealer.

The following Letters are from prominent horsemen and nearly, if not all of them large owners.

BOSTON, MASS., Jan. 30th, 1878.

Messrs. French & Coffin—Gents:—We have used "Kendall's Spavin Cure" successfully in two instances, one of them being a valuable trotting mare. The cure in both cases was complete. It is the only effective remedy we have known for the purpose, and we take pleasure in adding our testimonial to its virtues.

Yours Truly,
CILLE, STIMPSON & WOODBURY.

Office U. S. Marshall, Western Dist. of Michigan, KALAMAZOO, April 15th, 1878.

B. J. KENDALL, Enosburg Falls, Vt.—Dear Sir:—I received the two bottles of your Spavin Cure forwarded by express in January last. I am happy to state that it performed all your advertisement called for. In three weeks after I commenced using it, the Spavin was entirely removed and a valuable horse restored to usefulness.

Very truly yours,
JOHN PARKER.

ALEXANDER, N. Y., Jan. 23d, 1878.

J. S. LYTLE & Son, Buffalo, N. Y.—Gents:—Have you a stock of "Kendall's Spavin Cure" on hand? I shall be in Buffalo the first of next week, and shall want half a dozen bottles. I have used it for one year with the best of luck. It is a sure cure for Spavins and Ring-bones if used according to directions. I have got it for several of my neighbors and they think there is nothing like it. I have several orders for it now, and thought I would write you so you would be sure and have it on hand when I go to Buffalo.

I am Yours &c.,

C. W. VANDE BOGART,
Breeder of Blooded Horses and dealer in Horses and Trotters, Alexander, Genesee County N. Y.

Maple Grove Farm, EDDYVILLE, N. Y., Aug. 23d, 1877.

B. J. KENDALL, M. D.—Dear Sir:—I have been using Kendall's Spavin Cure on a valuable stallion that I own. He kicked through a door and got his foot hung, taking out a piece of skin 1 1/2 by 3 inches, which left a fearful wound and I thought he was ruined for life. After a long time I got it healed, leaving a bunch or callous as large as a large ring-bone. I have used one and one half bottles of Kendall's Spavin Cure and the bunch is nearly all gone. I can not say too much for the Spavin Cure, for it has done for me what I supposed was out of the power of man to do in removing the bunch.

I am a breeder of Ayrshire cattle, Leicester sheep, Berkshire hogs, and Percheron horses, and unless I am extraordinarily lucky will want to use more or less of the Spavin Cure every week. Send me one half-dozen bottles by express.

Yours Truly,
S. N. DELAR.

Stock Farm, WADDINGTON, N. Y., Feb. 7th, 1878.

B. J. KENDALL—Sir:—I would say that I consider your Spavin Cure a truly beneficial article for the removal of spavin and any other enlargement on all animals as well as horses.

Yours &c.,

WALTER RUTHERFORD.

The following letter was written to our agent in Louisville, Ky., by the owner of the stage route from Lebanon, Ky., to Campbellsville, who is well known throughout the state.

CAMPBELLVILLE, KY., Jan. 30th, 1878.

J. W. MORRILL & Co., Louisville, Ky.—Gents:—The Kendall's Spavin Cure" sent me some time ago has proved invaluable in all cases for which I used it; sprains, sore back, galled shoulders, windgalls and scratches. Fortunately I did not have any stock at the time with spavin. You can use my name if you wish.

Yours Respectfully,

GEORGE BORDERS.

BUFFALO, N. Y., Feb. 9th, 1878.

This is to certify that I have used Kendall's Spavin Cure for a splint, and am happy to testify that it has fully cured it.

Yours Respectfully,

WILLIAM SHARP,

Supt. of Thornton and Chester's Stable.

BUFFALO, N. Y., Feb. 13th, 1878.

I can fully testify that "Kendall's Spavin Cure" will take the soreness from any spavin, and will guarantee it will cure a curb to my own satisfaction.

ARTHUR TUTTLEBEE,

Veteran horseman, 71, Edward St.

PROVIDENCE, R. I., Feb. 18th, 1878.

DR. B. J. KENDALL—Dear Sir:—I take pleasure in stating to you that I have used your "Spavin Cure" with perfect success on one of my horses, which had contracted a bad spavin. By applying your Spavin Cure faithfully, I effected a complete cure and I can recommend it to any one wishing a cure for such complaints.

Truly Yours, GEO. H. PAGE.

WOODSTOCK VALLEY, CONN., Feb. 16th, 1878.

DR. B. J. KENDALL—Dear Sir:—It gives me pleasure to add my testimonial to your very valuable medicine, viz., "Kendall's Spavin Cure" I cured a spavin on my horse by using one half bottle, and, in my sales among my customers, it has invariably proved just what it is recommended to be. I shall want another box of it soon.

Very Truly Yours,

A. M. BANCROFT, P. M.

FAIR HAVEN, VT., Feb. 18th, 1878.

B. J. KENDALL—Dear Sir:—Your "Spavin Cure" is all it is represented to be, and so far has given good satisfaction for both man and beast.

T. E. WAKEFIELD, M. D.

MEREDITH VILLAGE, N. H. Feb. 17th, 1878.

DR. KENDALL—Dear Sir:—The horse that I used your Spavin Cure on had a splint as large as a hen's egg and it had been there about a year, and kept growing larger. I used one bottle of your Spavin Cure on it which took it nearly all off. I then used a half bottle more and it took it entirely off so that the leg was as smooth as the other. It was worth \$100 to me and I therefore feel very grateful to you. Please send me one half doz. of your Spavin Cure, "C. O. D."

Yours with respect,

JOHN C. TOWLE.

HAVERHILL, MASS., Feb. 13th, 1878.

MR. KENDALL—Dear Sir:—I have for the past twenty years used various kinds of spavin cures and experienced many different results. I was induced to try your "Kendall's Spavin Cure" and will say I have never before found a cure operating so mildly and yet so thoroughly. The animal that I used it on had what I considered an incurable spavin, but the horse is now entirely cured of his lameness and the bunch is nearly removed, from using only two bottles.

Respectfully Yours,

FRANK FOOT.

LAWRENCE, MASS., Feb. 27th, 1878.

B. J. KENDALL—Dear Sir: your "Spavin Cure" has entirely cured my horse of a very bad bone spavin.

Yours Truly, G. B. HANCHETT.

DUNHAM, P. Q., March 10th, 1878.

DR. B. J. KENDALL—Dear Sir:—About a year ago I fell in the road on to some ice and was badly hurt in the hip joint which caused me much suffering. I tried various remedies but none gave relief until I tried your Spavin Cure. I applied it full strength twice a day for about two weeks during last October, and it effected a perfect cure. I have since then been well and free from lameness. It is very valuable for man as well as for beast.

Yours Truly,

CHESTER K. GREEN.

CHILESBURGH, KY., Feb. 20th, 1878.

DR. B. J. KENDALL—Dear Sir:—I have tried your Spavin Cure on a chronic case of bone spavin which has been treated by two of the best horse doctors in the land. The case was fixed twice and I can safely say that your Spavin Cure did more good than anything which I ever tried. I believe it to be a good remedy for a great many difficulties, ring-bone and bone spavin. I am sure it will cure if taken in time. It is also good for scratches, grease heel &c.

Yours Respectfully,

T. B. MUIR.

GLOVER, VT., Feb. 13th, 1878.

DR. B. J. KENDALL—Dear Sir:—I used 1 bottle of your Spavin Cure on a horse of ours and removed a spavin entirely; and one of my neighbors had a colt with a bad ring-bone, and by his using two bottles of your Spavin Cure, he cured it entirely. It has given good satisfaction here.

Yours Truly,

A. H. HALL.

PATTEN'S MILL'S, Washington Co., N. Y., Feb. 21st, 1878.

B. J. KENDALL, M. D.—Dear Sir:—The particular case on which I used your "Spavin Cure" was a malignant ancle sprain of sixteen months standing. I had tried many things but in vain. Your "Spavin Cure" put the foot to the ground again, and for the first time since hurt, in a natural position. For a family liniment it excels anything we ever used.

Yours Truly,

M. P. BELL.

Pastor M. E. Church, Patten's Mills, N. Y.

HYDE PARK, VT., Nov. 8th, 1877.

B. J. KENDALL, M. D.—Dear Sir—I am no great friend to patent medicines but do not hesitate to speak a good word for your spavin cure. Two years ago I bought a valuable three year old colt in Canada, but before reaching home discovered that he was lame from a curb. The curb continued to enlarge and would at times render the colt so lame that he could not be driven, and hobbled very badly. I was induced to try your spavin cure and with one bottle and a half took away the enlargement and from that day to the present time he has not been lame. For curb therefore I do not hesitate to recommend people to try "Kendall's Spavin Cure."

Yours Truly,

O. S. BASFORD.

Editor of The Lamoille News.

LOWELL, MASS., May 25, 1878.

B. J. KENDALL:—Dear Sir :—send us as usual three (3) dozen Kendall's Spavin Cure.

We received your enquiry for references, and have delayed answering from time to time, in hopes of getting one from a man who used 10 bottles and completely cured a spavin of six years growth on a horse that after the cure trotted better than 40 and sold for \$450.00. When he commenced to use the Cure the horse was dead lame and would not sell for \$10.00. We did not know the man's name and have not been able to find him since your letter.

Yours Respectfully,

CROWELL & HARRISON,

Apothecaries, Lowell, Mass.

What is good for man is good for beast, and vice versa.

It has long been our opinion that what was good for man was also good for beast, but for all this it was a long time before we even thought of using "Kendall's Spavin Cure" for man, yet we knew that it contained nothing which would contra-indicate its use. The first we knew of its being used on man was when we were informed by a man that a short time before, his son cut his knee badly and as he had nothing else in the house which he could use, and had used the Spavin Cure for various purposes with excellent success, he concluded to pour a little directly into the wound and did so, and he informed me that he never saw anything work so nicely; this gave him so much confidence in it, that he used it for headache by bathing the forehead and temples with it, which he said worked "like a charm." Since hearing the above report we have used it and known of its being used with most gratifying results, until now we feel confident that no medicine is used with better results on human flesh for any bruise, lameness, sprain, rheumatism or for any purpose for which an external remedy is used. In using it for any difficulty of long standing, it should be applied for a long time, as long standing difficulties cannot be removed in a short time. It can be applied with a feather, small swab or with the hand, and by applying two or three times a day for several days, it will usually cause the skin to be some sore on man, and we recommend that for all long standing difficulties it be applied after it becomes some sore just the same as before, until the disease is removed. Only a little is necessary at each application.

Agents for Kendall's Spavin Cure.

WE give below a few of the agents, most of whom sell at *wholesale* and *retail*. It is also sold by nearly all of the wholesale druggists, and by a large share of the retail dealers in medicine; but if your dealer has it not in his stock and will not get it for you send direct to B. J. Kendall, Enosburgh Falls, Vt., and we will send, on receipt of price (\$1. per bottle or six for \$5.) to any address and we usually put in with every sample order of this kind a present worth about what the express will be, as near as we can calculate.

SOME OF OUR AGENTS.

Smith, Bourn & Co., Hartford, Conn.
O. G. Beckwith, New London, Conn.
P. Hayden & Co., 45 Lake St., Chicago, Ill.
Van Schaack, Stevenson & Co., 92 Lake St., Chicago, Ill.
Wm. W. Marmon, Bloomington, Ill.
Geo. K. Share & Co., 40 South Meridian St., Indianapolis, Ind.
Browning & Sloan, 9 East Washington St., Indianapolis, Ind.
Haight, Sears & Co., Davenport, Iowa.
J. W. Morrill & Co., 315 Main St., Louisville, Ky.
Joseph Schwartz, 47 Perdido St., New Orleans, La.
John W. Perkins & Co., Portland, Maine.
W. F. Phillips & Co., Portland, Maine.
Charles Sager, Portland, Maine.
French & Coffin, 100 Federal St., Boston, Mass.
Geo. C. Goodwin & Co., 38 Hanover St., Boston, Mass.
Geo. N. Newhall, 30 Exchange St., Worcester, Mass.
Crowell & Harrison, 139 Central St., Lowell, Mass.
J. T. Webber & Co., Springfield, Mass.
Charles Clarke, 179 Essex St., Lawrence, Mass.
Robt. Lawson & Co., 277 W. Baltimore St., Baltimore, Md.
P. Hayden, 104 Woodward Avenue, Detroit, Mich.
Farrand, Williams & Co., 15 Larned St., Detroit, Mich.
Noyes Bros. & Cutler, 32 Robert St., Saint Paul, Minn.
Schmidt & Miller, 31 Robert St., Saint Paul, Minn.
Haydens & Allen, 512 North Main St., St. Louis, Mo.
Meyer Bros. & Co., 10 N. Second St., St. Louis, Mo.
C. F. Goodman, Omaha, Nebraska.
Edwin Branch, Manchester, N. H.
Underhill & Kittredge, Concord, N. H.
C. B. Smith & Co., 40 Warren St., New York City.

W. H. Schieffelin & Co., 170 William St., New York City.
 C. M. Moseman & Bro., 128 Chambers St., New York City.
 Woodward & Hill, 324 Broadway, Albany, N. Y.
 A. V. Smith & Co., 65 State St. Rochester, N. Y.
 C. W. Snow & Co., Syracuse, N. Y.
 B. D. Bramer., Syracuse, N. Y.
 J. S. Lytle & Son, 20 Exchange St., Buffalo, N. Y.
 Gerity & Morrill, 126 Lake St., Elmira, N. Y.
 George Windheim, 9 Broad St., Utica, N. Y.
 Strong, Cobb & Co., 114 Superior St., Cleveland, O.
 James W. Meek, 43 East Spring St., Columbus, O.
 J. J. Bantlin, 146 Main St., Cincinnati, O.
 C. B. Day & Co., 38 N. Third St., Philadelphia, Pa.
 Geo. W. Fritz, 410 Lackawanna Ave., Scranton, Pa.
 Harris & Ewing, Pittsburg, Pa.
 E. Allen & Co., 3 & 5 Fulton St., Providence, R. I.
 Wm. Blanchard, Woonsocket, R. I.
 A. Wrenn, Norfolk, Virginia.
 Wells, Richardson & Co., Burlington, Vt.
 George Dyer, 375 East Water St., Milwaukee, Wis.
 Davis & Dibblee, Fredericton, New Brunswick.

IMPORTANT TO MERCHANTS AND HORSEMEN.

We would like a good agent to sell "Kendall's Spavin Cure," and this book, in every town in the United states.

We hope that none but reliable and responsible persons will make applications for the agency, and to all such we would say that we will print circulars for our agents with their card printed on them and send free by mail to any person who buys the Spavin Cure either of us or of any of our wholesale agents to sell again, if they will only write to us giving name and place written plain that we may know number wanted &c.

We recommend all to send their orders to the nearest wholesale agent.

In sending orders direct to us it is best usually to send P. O. money order or check for the amount wanted with full shipping directions, and the order will receive prompt attention and by so doing you will save time and expense. To all who would investigate to know if we are responsible for any money which might be sent us we would refer to the following well, known firms. Wells, Richardson & Co., Burlington, Vt. Geo. C. Goodwin & Co., Boston, Mass. and Charles Pfizer & Co., New York City.

REFERENCES.

- Rev. O. S. Basford, Pastor M. E. Church, Hydepark. Vt. [N. Y.
 Rev. M. P. Bell, Pastor M. E. Church, Patten's Mills, Washington Co
 Cilley, Stimpson & Woodbury, Livery, Boston, Mass.
 Charles A. Currier, Special Agent for the Massachusetts Society for
 the prevention of cruelty to Animals, Boston, Mass.
 Joseph Baker, Agent for the same Society, East Boston, Mass.
 H. W. Petus, Foreman Metropolitan Horse Car Stable, Boston Neck,
 Mass.
 French & Coffin, 100 Federal St., Boston, Mass,
 Thomas Langlan, Boston, Mass.
 A. M. Sawyer, Agent for the Portland Society for the prevention of
 cruelty to animals, Portland, Maine.
 Charles Sager, Livery, Portland, Me.
 N. E. Wight, "
 George Borders, Campbellsville, Ky., proprietor of stage route from
 Lebanon to Campbellsville, Ky.
 C. W. Vande Bogart, Breeder of Blooded Horses and dealer in horses
 and trotters, Alexander, Genesee Co., N. Y.
 Sumner Howard, (Late Attorney General for the U. S. at Salt Lake
 City,) Flint, Mich.
 John Parker, (U. S. Marshall, Western Dist. of Mich.) Kalamazoo,
 Mich.
 H. H. Littell, (Supt. Louisville City Railway Co.) Louisville, Ky.
 C. M. Moseman & Brother, 128 Chambers St., N. Y. City.
 P. Hayden & Co., 45 Lake St., Chicago Ill.
 Thomas O'Connor, Chief Engineer Fire Department New Orleans La
 C. E. Mosher, Driver and trainer, Lawrence, Mass.
 John W. Porter & Co., Livery & Sale Stable, Lawrence, Mass.
 C. A. Chandler, freight agent at Eastern R. R., Lawrence, Mass.
 Hanchett & Carter, (Livery) Chicago, Ill.
 Wisconsin Leather Co., Milwaukee, Wis.
 B. J. Demarest, Trainer for O. J. Schoolcraft, Richmond, Va.
 J. C. Talcott, New York City.
 F. Harry Hamilton, No. 132 West 31st Street, New York City.
 E. Allen & Co., No. 5 Fulton St., Providence R. I.
 Geo. H. Page, Livery, Providence, R. I.
 J. S. Lytle & Son, 20 Exchange St., Buffalo, N. Y.
 William Sharp, Supt. of Thornton & Chester's Stable, Buffalo, N. Y.

- Arthur Tuttlebee, 71 Edward St., Buffalo, N. Y.
 C. B. Day & Co., 38 N. Third St., Philadelphia, Pa.
 Woodward & Hill, 324 Broadway, Albany, N. Y.
 George Dyer, 375 East Water St., Milwaukee, Wis.
 J. T. Webber, Springfield, Mass.
 R. W. Nichols, Plattsburg, N. Y.
 W. H. Smith, & Bro., Hillsdale, Mich.
 E. R. Towle, Agricultural Editor St. Albans Messenger, West
 Berkshire, Vt.
 Frank Foote, Haverhill, Mass.
 A. M. Bancroft, Woodstock Valley, Conn.
 John C. Towle, Meredith Village, N. H.
 Dr. Thos. E. Wakefield, Fair Haven, Vt.
 A. H. Hall, Glover, Vt.
 Walter Rutherford, Stock Farm, Waddington, N. Y.
 Robt. Wood, Charlestown, Ind.
 E. A. Laduke, Burlington, Vt.
 Fred J. Graves, East Barnard, Vt.
 A. Stevens, Bridport, Vt.
 C. P. Blake, Epping, N. H.
 Edwin Branch, Manchester, N. H.
 H. N. White, Panton, Vt.
 D. W. Nash, New Haven, Vt.
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A FEW OF THE MEDICINES USED FOR THE HORSE.

WE once heard it remarked by an eminent professor of *Materia Medica* that if he was compelled to combat with disease with either Opium alone, or all of the remaining drugs in use without the opium, he would choose the opium alone.

Another professor has said "Give me mercury, iodine, quinine and the lancet, and I will combat with disease." While I do not altogether endorse the views of either of these distinguished professors, either in the number or selection of medicines they would choose first in preference to all others, I would say, give me as my first choice, aconite and iron in connection with the opium and a few others and I should feel that I was fitted out with the most important drugs, for the successful treatment of the diseases of the horse.

We will give something of a history of the more important drugs used for the treatment of the diseases of the horse, with their effects and uses.

ACIDS. These nearly all have a sour taste, and are derived from the vegetable, mineral and animal kingdoms. The number of acids used in medicines is small; among the most important of these are acetic acid, muriatic acid, nitric acid, sulphuric acid, tannic acid, gallic acid, carbolic acid, arsenious acid, phosphoric acid, tartaric acid.

ACETIC ACID. When diluted with seven parts of water it is about the strength of ordinary vinegar. It is produced from the purification of pyroligneous acid.

Use. It is used by some with good results for sprains, and bruises, and for the destruction of the poison of insects, by adding to six ounces of the acid $\frac{1}{4}$ ounce tincture of opium and two ounces of camphor.

MURIATIC ACID. This acid is obtained by the action of sulphuric acid on common salt. When pure it is a transparent colorless liquid; but the commercial acid has a yellowish color.

Muriatic acid is a good tonic in debilitating diseases of the horse and is refrigerant and antiseptic.

Dose. Half to one fluid drachm may be given largely diluted with cold water and repeated two to four times a day.

Externally, it may be used for sores in the feet, by pouring a few drops in the sores or nail holes. Eight or ten drops may be advantageously used for poll-evil or quittor by being poured directly into the fistulous opening.

It may be used for various affections of the skin by diluting with glycerine, and washing off in a short time if used strong.

CARBOLIC ACID. This important medicine is obtained from coal tar oil. Its smell resembles that of creosote.

Uses. It is used for various purposes such as a disinfectant in stables, where animals have distempers, fevers, &c., by washing the stalls, floors and ceilings, with water which contains a small quantity of the acid: also used with gratifying results for unhealthy wounds and sores, by applying a solution of the following strength; Carbolic acid, 1 oz., fresh, soft water 6 pints; this prevents putrefaction and will cause the wound to be more healthy and heal sooner. Carbolic acid is also used for destroying wood ticks, lice and all kinds of parasites, and is quite effective in preventing the bot fly from depositing her eggs when those parts which are commonly chosen by the bot fly, are washed with a solution double the strength given above.

NITRIC ACID. (called also Aqua Fortis.) This is also a valuable tonic when properly given. It is extremely sour and corrosive, and should be guarded by the same caution as in giving the sulphuric acid.

Dose. It may be given in doses of 5 to 25 drops largely diluted with water.

SULPHURIC ACID. (called also oil of Vitriol). This acid is obtained by burning sulphur, mixed with one eighth of its weight of nitre over a stratum of water contained in a chamber lined with sheet-lead.

Uses. Many consider this acid to be preferable to any other of the acids for internal use, in debility of digestive organs, general weakness and as a refrigerant.

Externally, it is used similarly to muriatic acid. When it is desired to use it as a caustic it should be mixed with dry powdered white vitriol sufficient to make it of a pasty consistence so it can be confined to the location which it is desired to cauterize.

This acid as well as nitric or muriatic acid is a powerful irritating poison when given into the stomach undiluted; and persons should bear in mind that when these acids are given that they should be largely diluted with water and thoroughly mixed before administering.

Dose, of Sulphuric acid is about 10 to 40 drops largely diluted with water.

TANNIC ACID. (Called, also, Tannin.)—This is produced from Nutgalls, Oak bark, &c. It is uncrystallizable, white, or slightly yellowish, with a strong astringent taste, inodorous, soluble in water, but not very soluble in alcohol or ether, and insoluble in most oils.

Tannic acid precipitates solutions of starch, albumen, and gluten, and forms with gelatine an insoluble compound which is the basis of leather.

Uses. It is valuable mixed with water as a wash for running sores and ulcers, and is also excellent for diarrhœa, and may be given for any disease where this class of medicines is indicated. It will, in many cases of bleeding sores, stop the bleeding if applied locally. It is sometimes used as an eye-wash with excellent success, by applying a solution of the following strength: tannic acid, $\frac{1}{4}$ ounce, cold water, one quart; as it is harmless and safe to use, we would recommend it as an eye-wash.

Dose. For diarrhœa the dose should be from $\frac{1}{2}$ to 1 drachm.

ACONITE. (Wolfsbane—Monkshood.) An active poison which grows abundantly in the forests of Germany, France and Switzer-

land. It is also cultivated in the gardens of Europe, and has been introduced into this country as an ornamental flower. All parts are poison. The leaves and roots are used. A tincture made from the root is much more active than from the leaves.

Tincture of Aconite Root.—This is one of the most powerful, and successful sedatives which is in use. It is one of the best medicines we have for the successful treatment of several of the diseases of the horse, when properly used; and has to a certain extent done away with bleeding and physicking; the former of which has been in the past so indiscriminately and dangerously used. It is not only sedative, but it is an anodyne, diaphoretic and antiphlogistic. It controls fever, reduces inflammation, and allays pain. In fact, we have no drug, which will so well control the circulation and action of the heart as aconite.

Medical Uses—The effects of remedial doses are felt, in 20 or 30 minutes, and are at their highth in an hour or two, and continue with little abatement from 3 to 5 hours. We have no single drug which is used with such gratifying results in many cases, such as lung fever, or in fact, inflammation of any part of the body, colic from eating green food, and founder.

Caution. In over doses this valuable drug is an active poison, therefore, we would caution all who use it about giving too large quantities, as prostration and perhaps death would be the result. Never give more than 5 or 6 doses, if 25 drops are given at each dose, nor more than 7 or 8, if 20 drops are given at each dose. The dose may vary from 10 to 45 drops, but for most purposes should be about 25 drops.

ALOES. Are of several varieties: Cape, Barbadoes and Socotrine, and is the condensed juice of the leaves of a plant. Given by some as a purgative or cathartic for horses; others consider it bad practice to use it much. *Dose.* should, for ordinary purposes, be from $\frac{1}{2}$ to 1 ounce. It is generally best to combine with it fennugreek, ginger or canella.

ANTIMONY, exists in its natural state in France and Germany. The preparations of antimony which are used for the horse most, are 1st, *sulphuret of antimony*, also commonly called *black antimony*. This is by many considered a remarkable remedy for the horse, for

many purposes, but especially to make the horse *shine*, and to have the appearance of being quite fat. 2d. *Tartrate of antimony and Potassa* commonly called *tartar emetic*, has been in great repute in the treatment of diseases of the chest; but is now considered of but little value in these diseases.

ANISE SEED. Are obtained from the anise plant which is a native of Egypt, but has been introduced into the south of Europe and is cultivated in various parts of that country, and is cultivated occasionally in the gardens of this country.

Uses. It is a grateful aromatic carminative; and is supposed to have the property of increasing the secretion of milk. It is used for flatulent colic, indigestion, loss of appetite, etc. It is an excellent remedy when combined with other medicines for various kinds of Condition powders.

Dose. From $\frac{1}{2}$ to two ounces and may be repeated three times a day.

AQUA AMMONIA. (called also Hartshorn.) This medicine is very valuable both for internal and external use. It is a diffusible stimulant, antispasmodic and antacid. It is used *externally* with olive oil, and in various mixtures as a counter irritant. Used as an antidote for bites of poisonous serpents. Given with good results for flatulent colic in *doses* of two to three drachms given with milk as directed below for carbonate of ammonia.

CARBONATE OF AMMONIA. This is a very valuable medicine for debility and prostration from lung fever, bronchitis, influenza or any disease causing great weakness. Its effects are similar to those of aqua ammonia given above.

Dose. One to three drachms which may be repeated three times a day, and should be given in milk or cold gruel, so as to protect the mucus membranes of the throat and stomach.

ARSENIC. This is an active poison in large doses, but when given in proper doses is an excellent tonic, improving the general condition of the horse. It should be given in a large bulk of cut feed, so as to protect the stomach. From 2 to 5 grains may be given in the 24 hours, and should be continued for about two weeks, when the medicine should be stopped for one or two weeks, and then it

may be given again as before. Some consider it a sure cure for heaves.

ASSAFÆTIDA. A gum-resin obtained from a plant of Persia by making incisions into the living root, and the juice which exudes is collected and dried in the sun. It has a peculiar odor similar to that of onions.

Uses. It is antispasmodic, expectorant and a moderate stimulant and laxative. It is given as a vermifuge and for loss of appetite, also used for heaves in connection with camphor. (See treatment of heaves.)

Dose. One to three drachms, and if the stimulant effect is wanted give from one to two ounces of the tincture.

BLUE VITRIOL. This is an excellent medicine when given internally, as a tonic to build up the system. Given for glanders, farcy and various other diseases requiring tonic and alterative medicine, and should be combined with ginger, fenugreek or gentian. *Externally* blue vitriol is used with good results as a caustic for proud flesh, by touching the parts with a piece of the crystal. It is also excellent for many wounds, which have no proud flesh by applying it in solution, 6 to 12 grains to each ounce of soft water.

Dose. It may be given in doses from $\frac{1}{2}$ to 2 drachms, and given twice a day.

CAMPHOR. A peculiar concrete substance derived from a plant in China and Japan. It is recommended for nervous excitement, heaves, and is used in many cough mixtures. It is a favorite household remedy, and used externally to a large extent.

Dose. Camphor may be given in doses varying from $\frac{1}{2}$ to 2 drs. Camphor gum, 1 oz., and sweet oil 8 ozs., mixed, makes a very good external remedy for various purposes.

CANTHARIDES. (Spanish Flies.) This remedy is produced by collecting the beetle commonly called Spanish Flies.

These insects are of a beautiful, shining, golden green color, and usually make their appearance upon the trees of Spain, Italy, and the south of France in the months of May and June, when they are collected by placing linen cloths under the trees on which they have lodged through the night and by shaking the tree early in the morn-

ing while they are torpid from the cold of the night, and consequently let go their hold easily.

They are then deprived of life by the vapor from boiling vinegar, and then dried in the sun or in rooms heated by stoves.

Uses. Internally, cantharides are a powerful stimulant with a peculiar direction to the urinary organs, and in moderate doses it sometimes acts as a diuretic. Used with good results for glanders, and farcy.

The principle use of the cantharides is as a blister by mixing it with lard.

Dose. Spanish Flies may be given in doses varying from 3 to 7 grains given only once a day.

CASTOR OIL. This is the expressed oil of the seeds of the castor oil plant, which is now cultivated largely in this country throughout many of the Southern and Western States.

Use. This oil is very useful and safe for common use in the human family; but is considered unfit for the horse as it sometimes causes inflammation of the coats of the bowels without relief from the purging.

(Linseed Oil is considered as safe and efficient for the horse as castor oil is for man. See Linseed oil.)

Dose. When it is thought best to give castor oil or in the absence of the linseed oil it may be given in doses varying from $\frac{3}{4}$ to $1\frac{1}{4}$ pints.

CATECHU. An extract prepared from the wood of *Acacia Catechu* and found most abundant in the East Indies. It is a small tree seldom growing more than twelve feet in height with the trunk about one foot in diameter.

Use. An astringent which will bind the bowels in diarrhoea and is combined with good results with opium and prepared chalk for diarrhoea.

Dose. One to three drachms.

PREPARED CHALK. (*Creta Præparata.*) This is the only form in which chalk is used in medicine and is an excellent antacid; is one of the best antidotes for oxalic acid. It is used with good results for acidity of the stomach and for diarrhoea &c.

Dose. One to two ounces.

CHAMOMILE FLOWERS. This is a native of Europe and grows wild in all the temperate parts of that continent and is also largely cultivated.

Use. A very mild tonic and quite useful when combined with other medicines of this class.

Dose. It may be given in doses varying from $\frac{1}{2}$ to two ounces.

CHARCOAL. This may be given with good results powdered for chronic diarrhoea, dysentery and debilitated stomach.

Dose. Half an ounce to one ounce and it may be given suspended in gruel. It may be used with good results externally when applied to badly smelling wounds.

CHLORIDE OF LIME. This compound was originally prepared for a bleaching agent nearly a century ago, and has since been found to have valuable properties as a disinfectant. It is a dry, or but slightly moist, grayish-white, pulverulent substance, with an odor similar to that of chlorine.

Uses. Chloride of lime is a disinfectant, and from its deodorizing and antiseptic properties makes an excellent stimulant to unhealthy ulcers, applied in solution, also for cutaneous eruptions, &c. Its principal use is as a disinfectant in stables occupied by glandered and other sickly horses, and may be sprinkled on the floor every morning, or may be suspended in the stable in a box which has several holes cut into it.

Dose. When it is thought best to give it internally 1 to 3 drachms may be given at a dose, in water.

CHLOROFORM. Is a colorless, volatile, liquid, having a bland ethereal odor and sweetish taste.

Uses. It is an excellent stimulant for horses when having a chill, from cold or in congestion and is sometimes given to quiet pain in colic and other painful diseases. It is used mostly in liniments and sometimes for inhalation. One ounce of chloroform and three ounces of olive oil well mixed makes an excellent liniment for external use. When chloroform is given to the horse by inhalation, he should be well secured so as to prevent his doing any damage, as it sometimes makes the horse perfectly wild and uncontrollable. When any operation of any considerable extent is to be performed

it is best to tie the horse down, and then administer the chloroform by pouring about an ounce of chloroform on a sponge, and holding the sponge to one nostril and covering the nose loosely with a large towel; but care should be taken to allow the horse pure air, also to breathe with the fumes of the chloroform. Usually two to four ounces is sufficient to produce its effects when inhaled.

Dose. One to two drachms well diluted with weak spirits.

CROTON OIL. This is a very powerful cathartic and dangerous if improperly used. But as a "last resort" many times works very well.

Dose is usually from 10 to 15 drops.

ELECAMPANE. This is one of the best medicines in use for lung affections, and should enter largely into all mixtures for this class of diseases. It is also an agreeable aromatic, and should form a part of all Condition Powders.

EPSOM SALTS. (Sulphate of Magnesia.) This medicine so well known in every household, is used with good results as a febrifuge, and is often given as a purgative. It is not only cheap, but it is very good for several diseases and forms a part of various condition powders.

Dose. $\frac{1}{2}$ to 1 pound with one ounce of ginger dissolved in as large quantity of cold water as can be given the horse conveniently and also allowing the horse to drink if he will after the salts have been given, for the reason that they will be much more efficient if largely diluted.

ERGOT. This is produced from diseased rye and is of great value in the foaling season, as it is the most effectual remedy known for increasing the action of the uterus, when there is not sufficient contraction. Great care should be taken when it is given that nothing prevents delivery, only deficient action of the uterus. It should not be used by the non-professional as they would be more likely to do harm with it than good; in fact, the cases demanding its use are *very* rare, but as we said before where its use is really called for nothing will act as well.

Dose. Of the powder, $\frac{1}{4}$ to $\frac{3}{4}$ ounce. Of the tincture, one to two fluid ounces may be given.

ETHER. (Sulphuric Ether.) This is a very valuable remedy and is used with excellent results for colic, and for various purposes is a good antispasmodic. Given with tincture of opium it works admirably for colic.

Dose. One to two fluid ounces.

EUPHORBIIUM. This is the concrete resinous juice of a plant growing in Africa and in other parts of the world.

Use. Owing to the severity of its action, its internal use has been entirely abandoned and it is now only used externally, and it is so severe that it is but very little used now externally.

MALE FERN. The root of a plant growing in South Africa. Is said to be very valuable for ridding animals of worms.

Dose. It may be given to the horse in doses of $\frac{1}{2}$ to one pound of the powdered root, and followed with a purgative the next day.

FENUGREEK. An annual plant growing spontaneously in Southern Europe. It has a peculiar odor which is quite agreeable. The seeds ground, is the portion used, and they enter largely into nearly all the condition powders which are put up and sold through the country.

Dose, $\frac{1}{4}$ to 1 ounce.

NUT GALLS. A morbid excrescence upon the oak tree resulting from holes being made by an insect in the bark.

Uses. It is a powerful astringent, and is used to bind the bowels when affected with diarrhœa or dysentery, and used for applying to the greasy heels of horses.

Dose. One to three drachms.

GENTIAN. A valuable tonic. It excites the appetite, invigorates digestion, moderately increases the temperature of the body, and the force of the circulation, and may be combined with iron for debility, and is used in connection with other drugs for various purposes and forms an *important* part of various condition powders.

Dose, $\frac{1}{2}$ to 2 drachms repeated 2 or 3 times a day.

GINGER. Several varieties, of which the *Jamaica* or *white ginger* is the best, but all are used with good results for colic, loss of appetite, &c., and should enter into every dose of purgative medicine.

Dose, from 1 to 4 drachms.

GLYCERINE. This is the sweet principle of fats or oils, and was discovered nearly a century ago when it was called the *sweet principle of oils*. It is a fluid which scarcely ever dries up, and is a thick syrupy substance resembling castor oil in its looks, but without smell and very sweet to the taste.

Uses. It is an excellent application to many sores and is used with very gratifying results for scratches or sore heels; also skin diseases where a softening and soothing application is required. When a little is added to poultices, it has the effect to keep them soft and moist for a long time. It is soluble in water.

IRON. This is one of the most valuable medicines in use for many cases of debility, as it supplies the red corpuscles of the blood which are generally deficient in a debilitated animal. Various preparations of iron are in use, of which the following are most commonly used.

Copperas,—(Sulphate of Iron.) This is one of the cheapest and for many purposes the best. It is tonic and astringent, and used with good results for weakness, bad condition, swelling of the legs, body, sheath, &c.

Dose, $\frac{1}{2}$ to 2 drachms and should be combined with the same quantity of gentian or ginger, and given in the feed, or as a drench with cold water.

Muriated tincture of iron. This is an excellent preparation of iron, and may be given in doses varying from $\frac{1}{4}$ to 1 ounce. Although several other preparations of iron are in use, the two given above are all that are ordinarily required.

JUNIPER BERRIES. The best Juniper berries come from the South of Europe and are about the size of a pea and more or less shrivelled. They are produced from a small evergreen shrub which sometimes grows twelve or fifteen feet high. It is used for loss of appetite, to stimulate the stomach to action, and in convalescence from disease.

Dose. One to two ounces.

KINO. This is inspissated juice of several plants which grow in Africa, East and West Indies, South America, etc.

It is a powerful astringent and is used in diarrhoea as a substitute for catechu which is not quite as powerful.

Dose. One to five drachms.

LINSEED OIL. This is perhaps the safest and best purgative in common use, and should be given by non-professional persons in preference to any other medicine.

Dose, 1 to 2 pints as a purgative.

LIQUORICE ROOT. This is the root of a small plant growing four or five feet in height and which is cultivated in England, the north of France, and Germany. It has an agreeable sweetish taste.

Uses. It is an excellent demulcent and well adapted to cases of irritation of the mucous membranes of the lungs, bowels, or urinary organs. It forms an important part of condition powders, and especially when given for coughs.

Dose. From $\frac{1}{2}$ to 1 ounce.

MERCURIAL OINTMENT. This is used mostly for skin diseases, as mange. But we prefer for this disease the treatment which we have already given in another place. Mercurial ointment is sometimes used with good results to rid animals of lice by boring a small hole where the animal is liable to rub its neck and fill it with mercurial ointment.

NITRE.—Saltpetre. This medicine has long been used as a febrifuge and as a diuretic, and is still held in high esteem by many, but there are other drugs which are better adapted to the treatment of the various diseases for which it has long been used.

Use. As a febrifuge in fevers and inflammations and for kidney complaints; also is used by many in condition powders for scratches and various disorders of the blood.

Dose. $1\frac{1}{2}$ to 3 drachms.

NUX VOMICA. This is an active poison in large doses but when given in proper quantities is an excellent tonic and nervine for the horse when suffering from depression, dyspepsia, etc.

Use. In paralysis and also in "glass eye" in the horse, depending upon a want of nervous energy in the optic nerve.

Dose. The tincture is generally used of which 1 to 3 drachms may be given two or three times a day.

OIL OF TAR. This is procured by the distillation of tar, and is an excellent remedy for any cough, heaves, &c. (See treatment

of heaves.) It is also an excellent application externally when mixed with equal parts of castor oil or sweet oil, to promote the growth of the hoof of the horse. This mixture makes an excellent hoof ointment. To darken the color, lamp black may be mixed in sufficient quantity to suit the color of the foot.

Dose. Oil of tar may be given internally in doses of from one half to two drachms.

OIL OF TURPENTINE. (Commonly called spirits or spirit of turpentine.) This is so common and well known that it will not need any description here.

Uses. It is stimulant, diuretic, anthelmintic, diaphoretic, and externally rubefacient. It is given largely in several diseases of the horse, such as colic, for various lung difficulties and for the expulsion of worms. As an external remedy combined with an equal quantity of sweet oil, or in various mixtures, it is used with good results, but should not be applied to the horse while in full strength.

Dose. The dose of spirits of turpentine is from one to two ounces and should *always* be mixed with twice its bulk of sweet oil.

OPIUM. This is the dried juice of the poppy, and is brought to this country from Turkey, (which is probably the best), and also from several other countries. It is certainly one of the most valuable drugs in use, but should not be used indiscriminately. It relieves pain, and is used with great success for colic and various other diseases.

Dose, is $\frac{1}{2}$ to $1\frac{1}{2}$ drachms.

OXIDE OF ZINC. This is as an inodorous, tasteless, yellowish, white powder, and insoluble in water and alcohol.

Uses. Given, internally, it is tonic and antispasmodic. Its principal use is external, applied to excoriated surfaces by sprinkling the powder on the affected part, or by applying it in the form of an ointment, by mixing one drachm oxide of zinc and one ounce of lard. It is used with good results for scratches, grease heels, and other sores which have a discharge of a thin fluid. Another good ointment may be made by mixing oxide of zinc to a mixture of shaved castile soap, moistened with a little water, and all thoroughly mixed together. The last mixture is an excellent preparation for scratches and grease heels on horses which are kept at work,

as it can be easily cleaned off at night, so that the surface may be cleansed before another application is made for the night. It allays irritation and is quite soothing to the parts.

Dose. Internally it is given in doses of from $\frac{1}{2}$ to 1 drachm.

RED IODIDE OF MERCURY. (Called also Biniodide of Mercury.)

This is a powerful irritant poison when taken internally and is used now only as an external remedy. It is a scarlet-red powder, which like other preparations of Mercury is very heavy for its bulk; not soluble in water and only slightly so in alcohol. It is held in great repute by veterinary surgeons for swellings of the glands of the neck; tumors and unnatural growths of all kinds.

It is used principally with Cantharides mixed with lard, which forms an excellent blister for various purposes. It is not generally used where it is desired to blister a large surface as it produces considerable pain.

ROSIN, OR RESIN. This is the residue left from the distillation of turpentine, and is used by horsemen quite freely, and many times is the cause of much mischief; as it is used to a considerable extent, to cause the horse to urinate more freely, and the overdoses, so frequently given, are often the cause of various diseases of the kidneys and loins. The oftener rosin is given the horse, the more he stands in need of it in the eyes of the driver. The kidneys become over-worked he desires to urinate more frequently, less urine is voided at each time. The mischief is not seen, and the owner hastens to give more rosin, thinking to remedy the defect that he has been instrumental in producing. It should be remembered that powerful diuretics, like powerful purgatives, tend only to weaken and to debilitate. If there be a urinary defect find out the cause, and, if possible have it removed, and the effect will cease; but do not attempt to do so by force, against all science and common sense.

SWEET SPIRITS OF NITRE. This is generally considered a good household remedy for fevers, &c. It is used for the horse to increase the action of the kidneys: but should not be given too freely in all cases of supposed inaction of the kidneys.

Dose, is from 1 to 2 ounces, given with a little cold water.

SULPHUR. Is a valuable medicine given internally for rheuma-

tism, in doses of $\frac{1}{2}$ to 2 ounces, and also for various disorders. It is also used with grand success for skin diseases.

TAR. The tar used in this country, is prepared mostly from a species of pine growing in the Southern States. Tar consists of resinous matter, united with acetic acid, oil of turpentine and various volatile empyreumatic products, and colored with charcoal.

Uses. The medical properties of tar, are similar to those of the turpentine. It is used occasionally with good results for complaints of the urinary passages, and also for coughs. Externally it is used for foul and indolent sores: also an excellent application to the bottom of the foot, to soften the hoof when too hard and the foot sore. Some prefer a mixture of glycerine and tar, mixed as follows; take of tar and glycerine each, six troy ounces, and of starch, in powder, two drachms; mix the starch thoroughly with the glycerine, previously warmed, then add the tar, and heat quickly to 212° . Strain, if necessary, and stir the mixture while cooling. Tar should be kept in every horse shoeing shop for putting on the shoe, usually with cotton batting or oakum, and having leather nailed on with the shoe.

Dose. 1 to 2 ounces repeated two or three times a day.

WHITE VITRIOL. (Sulphate of Zinc.) This preparation of zinc is a valuable medicine, also, for healing sores and wounds. It is used with good results, for healing fresh cuts and wounds, or ulcers, whether they be healthy or unhealthy, by applying a solution of the following strength: Take white vitriol, 1 oz., soft water, one quart. It is also used with very good results, in eyewaters, and perhaps is one of the very best of medicines we have for the eye. As we have given two or three receipts for eyewaters, with the miscellaneous receipts, we refer all who are interested to those.

Dose. When given as a tonic, 10 to 15 grains may be given dissolved in water. It is used with good results for irritated stomach, loss of appetite, &c.

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TO COLOR BUTTER!

EVERY DAIRYMAN SHOULD USE

WELLS, RICHARDSON & CO'S Perfected Butter Color.

We claim for it every point wanted in a **Perfect** butter color, viz.:

- 1st.—**Perfect Color.**—The butter never turns to a reddish tinge but keeps the bright golden color.
- 2d.—**Perfect freedom from any taste or smell** that can be imparted to the butter.
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CLAYMONT, DEL. Jan. 15th, 1878.

Messrs. Wells, Richardson & Co., Gentleman;—I would say the Perfect Butter Color bought of you about one year ago, costing me \$2.00, has returned to me in extra price of butter, \$175.00. You properly named it "Perfect" Butter Color. I have placed butter colored with it before competent judges who pronounced it gilt edge Jersey butter without color. I could not under any circumstances be without it. Very truly yours, WM. H. CHURCHMAN.

OUR PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by the very best Dairyman in this country. Harris Lewis, L. B. Arnold, O. S. Bliss, L. S. Hardin, A. W. Cheever, E. L. Sturtevant, E. D. Mason, and thousands more. Ask your Druggist or Merchant for it, or if you would like to know what it is, what it costs, who use it, and where you can get it, write to

WELLS, RICHARDSON & CO., Proprietors, Burlington, Vt.

C. M. MOSEMAN & BRO.,

MANUFACTURERS OF

Harness, Horse Clothing,

RIDING SADDLES,

Carriage Robes, &c.,

AT LOW PRICES.

Office and Salesroom

128 Chambers St., N. Y.

DR. B. J. KENDALL'S PECTORAL ELIXIR.

THE MOST VALUABLE REMEDY NOW IN USE

FOR COUGHS, COLDS, CROUP, INFLUENZA, HOARSENESS, BRONCHITIS, ASTHMA, CATARRH, LUNG FEVER, HOOPING COUGH, CONSUMPTION, and all other Lung Affections.

It has no equal as an expectorant. Thousands have tried it and scarcely one failed of immediate relief. It is pleasant to take and perfectly safe for the most delicate child, and also efficient for the most robust man.

GUARANTEE.

Any person making a fair trial of KENDALL'S ELIXIR for Coughs, Colds, Bronchitis, or Croup and failing of benefit, the proprietor will cheerfully refund, on satisfactory evidence, the cost of the medicine.

PRICES, 35 cts., 70 cts., and \$1.00; or six bottles for \$5.00.

Sold by dealers, or sent to any address on receipt of price.

B. J. KENDALL, M. D., Enosburgh Falls, Vt.

DR. QUAIN'S MAGIC CONDITION PILLS!

ARE THE BEST REMEDY EVER KNOWN FOR

Neuralgia, Rheumatism, Dyspepsia.
 Liver Complaint, Biliousness, Sick Headache,
 Pin Worms, Kidney Troubles, Constipation,
 Piles, Fever and Ague, Humors.
 and all diseases arising from a bad state of the blood.

Their effect is so immediate and so marvelous, that it sometimes seems almost miraculous. Thousands of persons who have been cured by these Pills have sent the proprietors voluntary testimonials to that effect, and giving thanks and blessings for the relief afforded. The following are samples of innumerable others received, and any doubter is invited to write to the persons whose names are signed to them, and ascertain their genuineness.

Dyspepsia Four Years, Constipation and Inflammation of the Bowels Three Years, Confined to my Room Two Years, so I could not sleep without Morphine. One Package of Quain's Condition Pills Cured me.

WEST LEBANON, ME., Feb. 22, 1875.

AMERICAN MEDICINE CO.:—I have been sick for three years with Dyspepsia, and for the past three years, Constipation and Inflammation of the bowels. I have suffered all that I could endure and live. I have been confined to my room for two years, and could not sleep nights without the use of morphine. I have been given up by physicians as past cure. I have taken one package of DR. QUAIN'S CONDITION PILLS, and they have done me more good than all the doctors I have had. I sleep well, I eat well and have no pain. They are all they are recommended to be. Please send me three packages.

JOHN W. LORD.

Neuralgia and Rheumatism, Liver and Kidney Complaint for twenty-five years, Cured by Quain's Condition Pills.

DANVERS, MASS., July 19, 1875.

AMERICAN MEDICINE CO.:—For the last twenty-five years I have suffered terribly with Neuralgia, and Rheumatism, also Liver and Kidney Complaints, causing severe pain in the back and hips, often unable for months to stoop to pick up any small article from the floor. I have had several doctors, spent a great deal for medicine, which did no good, and finally concluded that I must suffer the rest of my life. I happened one day to see your advertisement in the *Emigrationist*. I thought the medicine was just what I needed, and I sent to you last April for a package of Pills. Before I had taken eight I felt like a new person. Can sleep well nights, eat well, and have no Neuralgia pain, can stoop as well as ever. My friends are astonished at the change in me. I intend still to take them, and would not be without them if money would buy them. I think they must prove a blessing to thousands who will be induced to try them.

MRS. B. T. LANE.

Sick Headache.

SHARON, VT., March 12, 1877.

AMERICAN MEDICINE CO.:—I have taken one package of DR. QUAIN'S MAGIC CONDITION PILLS for sick headache, and found such relief that I want two more packages, one for myself, the other for a friend. Please send at once, for I am out of them, and feel unsafe, for they are the only thing I can get relief from.

MRS. J. M. SPAULDING.

Dyspepsia.

ASHLAND, N. H., Oct. 3, 1875.

AMERICAN MEDICINE CO.:—For over 25 years I have been afflicted with Liver Complaint and Dyspepsia. I have suffered much, and for a large part of the time have done no work. For two or three years past have been growing worse, and last fall I was so bad that life became almost a burden. I was much discouraged, and finally took my bed, where I lay several weeks. About this time I saw your Pills advertised and resolved to try them. I felt benefited by the first dose, and after taking one package I felt like a new man. And now I can report myself cured. I procured one package of you for a friend, and he reports himself cured.

SAMUEL PLAISTED, JR.

DR. QUAIN'S MAGIC CONDITION PILLS are for sale by leading druggists. A package sent by mail on receipt of 50 cents by American Medicine Co., Manchester, N. H.

GEO. N. NEWHALL & CO.,

MANUFACTURERS AND JOBBERS IN

CARRIAGE & SADDLERY HARDWARE,

Enamel and Rubber Cloths, Harness and Carriage Leathers.

Also, a complete Stock of the following:

KENDALL'S SPAVIN CURE,

THE BEST THING OUT.

Dr. HOPKINS'S MAGIC GOLD DUST,

The Farriers' Secret, for Scratches, Old Sores, &c.

Dr. PATZ' OINTMENT.

SOLE-LEATHER WASHERS, *Best in Market.*

CLIPPING SHEARS, &c. &c.,

And everything pertaining to the Horse or Carriage.

No. 30 Exchange St.,

Worcester, Mass.

THE DEXTER HORSE HOOK

For removing snow, ice, and gravel from horses' feet. Every man who drives a horse wants one. MANUFACTURED BY

D. ARTHUR BROWN & CO., Fisherville, N. H.

Sample, by mail, post-paid, on receipt of 25 cents.

DR. B. J. KENDALL'S QUICK RELIEF

Is one of the best *pain killers* in use. It is excellent for rheumatism, neuralgia, toothache, sprains, and all pains of any sort. Internally it is good for cramps, colic, diarrhoea, headache, sore throat, colds, &c.

It has, also, been found to be a complete remedy for colic in horses when given half to one twenty-five cent bottle, in a pint of milk.

We have never known it to fail of giving relief in a few minutes when given for colic.

SAMSON'S PATENT

RAILWAY HORSE POWERS

For one and two horses, and Machines for Sawing Wood.
Also, Machines for Threshing and Cleaning Grain, etc.,
MANUFACTURED BY

WM. SAMSON & CO., East Berkshire, Vt.

We wish to mention to the public that we are manufacturing a very superior Horse Power, and in asking for a trial of them we are not putting forth a new and untried Machine. For a number of years past we have been watching and testing quite a variety of Powers and, among them all, we are sure the Middletown or Gray Horse Power is the *best*. The only weak part we find in said Power is the lag iron that forms the endless cog chine that passes over the pinions on the main shaft. With our *Patent Lag Iron*, we just complete this well known machine. The general construction of our Powers is the same as the Gray's. *We use the best of material in every part.* Any one not acquainted with the Power mentioned please send to us for a circular. Just a word here about our *Patent Lag Iron*. It is made wholly of the *best refined wrought Iron*. The mortise above the cogs for receiving the tenon formed on the end of the lag-wood by a saw kerf, is made of *one piece of iron* and is so joined to coggled part that it greatly strengthens it. *There are no rivets that can work loose.* The lag iron is held firm to the lag by a simple but sure device. These irons will fit the Gray Powers. Any one wishing to examine one can have one *free* by sending to us. Our One Horse Powers are wider than has commonly been the practice of building. For our Two Horse Powers we have a gear, that can be furnished at a small cost, to reverse the motion, so that an undershot thresher cylinder can be used if desired. We wish further to be noticed that we are the only company of the kind that deals directly with the farmers or parties using our machines. By so doing they get the agent's commission, that is commonly paid by the purchaser, which is quite an item to notice. Send to us for price list and description of our Powers, Sawing Machines, Threshers and also the Franklin Co. Churns for either power or hand use.

Managers. } WM. SAMSON,
 } J. A. ROUSE.

1859

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1859

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Branch's Harness and Carriage Mart.

Harnesses and Horse Collars a specialty.

Carriages, Sleighs, Robes, Velocipedes, Children's Carriages & Sleds, Carriage Umbrellas, Carriage Mats,

Kendall's Spavin Cure.

Horse Blankets,

Trotting Boots,

Dasher Lamps,

Chamois Skins,

SPONGES,

Ornamental

Rein Supporters,

Vacuum Oil,

Hoof Cleaners,

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TRUNKS,

BAGS,

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WILDER'S

POWDERS.

DR. PATT'S

OINTMENT,

Rubber Blankets,

Horse Covers,

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WHOLESALE AND RETAIL.

PHAETON, BRITTON, WHITE, CHAPEL, OPEN, and TOP BUGGIES, EXTENSION TOP CARRIAGES, DEMOCRAT WAGONS, STORE and MARKET WAGONS, all grades from best to cheapest.

Every grade of Harness on hand, and made at short notice, and warranted as represented.

Fifteen Medals and Diplomas for meritorious Work, at different State and New England Fairs.

Orders Solicited.

Manchester,
N. H.

THE AMERICAN SHEARER M'T'G. CO.,

MANUFACTURERS OF POWER AND HAND

Horse Clipping Machines.

(Centennial Award.)

We make four power machines.

PRICES.

No. 1 has a rotary or vibrating cutter,	\$75.00
No. 2 has a rotary or vibrating cutter,	50.00
No. 3 has a rotary or vibrating cutter,	35.00
No. 4 driven by air, vibrating cutter,	50.00
Extra handles rotary complete,	20.00
“ “ vibrating, “	18.00

Price of Cutter, . \$ 1.00.

Price of Comb, . . 2.00.

Our hand machines are the best in the market, having the following advantages:

All its parts are made to a gauge and if any part is broken or worn out it can be replaced at list price.

Each machine is put up in a strong wooden box which is furnished with an iron plate on which to grind the cutters when they become dull.

The combs and cutters are readily detached from the machine.

If prepaid we send by mail without charge for postage.

If the combs and cutters are sent to us by mail, we sharpen and return for forty cents.

We make eight grades of hand machines.

No. 5,	plain, with 3 inch cutter,	\$ 3.75
No. 5 a,	polished, with 3 $\frac{1}{4}$ inch cutter,	5.50
No. 5 b,	“ “ 3 “ “	4.50
No. 5 c,	nicked, “ 3 “ “	5.00
No. 5 d,	“ “ 3 $\frac{3}{4}$ “ “	6.00
No. 10,	is a one hand machine 2 $\frac{1}{2}$ inch cutter, polished,	4.50
No. 10 a,	“ “ “ “ “ nicked,	5.00

No. 10, with a comb 3-16 inch thick makes a Barber's machine.

NASHUA, N. H., U. S. A., P. O. box 578.

B. J. KENDALL is authorized by the company to take orders.

KENDALL'S BLISTER.

We wish to have it understood that "KENDALL'S BLISTER" is entirely different from "Kendall's Spavin Cure," as the latter does not blister.

"Kendall's Blister" is an excellent remedy for spavins, (especially blood or hog spavins), ring-bone, splint, or any similar difficulty. In all bad cases of long standing we think they can be more successfully treated by the use of "KENDALL'S BLISTER" in connection with "KENDALL'S SPAVIN CURE." (as directed on labels,) than by any other remedies in use, as many cases which will not yield to any other remedies, or to either of these alone, will soon yield to the use of our Blister followed up by the use of our Spavin Cure, as directed.

Besides our Blister being a complete remedy when used with the Spavin Cure, we think it is well adapted to all cases where any blister would be applicable.

This blister is not like many, so powerful as to destroy the skin and other tissues, yet it is very effective, and we believe the very best preparation, of its kind, which is now in use.

Although this blister was first designed to be used with the Spavin Cure, we have learned that it works admirably alone, in many cases, and where parties live at a distance, and cannot find the Spavin Cure at their stores, they can easily obtain our Blister by forwarding us the price, (\$1.00), and we will send, by return mail, to any address.

Our BLISTER is put up in tin boxes and can be sent by mail with perfect safety, to any part of the world.

B. J. KENDALL, M. D., Enosburgh Falls, Vermont.

PURIFY YOUR
BLOOD IF YOU
WOULD BE HEALTHY.

KENDALL'S TONIC AND BLOOD PURIFIER is one of the best health-giving medicines and purifiers of the Blood that has ever been placed before the public.

We claim for this medicine all that is indicated by its name; that it is a Tonic and a Blood Purifier, which makes it the very best remedy for Scrofulous and Syphilitic Affections, Eruptive and Cutaneous Diseases. Pimples, Tumors, swelled Neck, Blotches, Boils, Salt Rheum, Ulcers and Sores, Scald Head, Rheumatism, Erysipelas, Female Weakness, Pain in the Chest, Joints, Limbs or across the back, Dropsy, Liver Complaints, Constipation, Palpitation of the Heart, Dyspepsia, Neuralgia, Headache, Abuse of Mercury and all conditions accompanied by General Debility and requiring an Alterative and Tonic Medicine.

If you have any disease fastened upon you send us a three cent stamp for our 32 page pamphlet which contains a treatise on diseases.

Where "Kendall's Tonic & Blood Purifier" is not kept by your dealers in medicines, we will send to any address on receipt of price \$1.00 per bottle or six bottles \$5.00. We will put in a present worth about what the express will be.

B. J. KENDALL, M. D.,
Enosburgh Falls, Vermont.

H. DRESSEL'S

Improved Carriage Top,

With PATENT SHIFTING RAIL, are in use most everywhere; they can be easily adjusted to any buggy, old or new. We call especial attention to Tubular Bow Sockets and best Norway Iron Rail. All our work warranted. Call for Price List.

H. DRESSEL,
Springfield, Vermont.
B. J. KENDALL, ag't for Proprietor.

LOOK WELL TO YOUR HORSE'S FEET.

This drawing shows how many horses are made lame and permanently injured by the use of the *cold-cut* and *sheared pointed* nails. This process of manufacture produces lamination, causing the iron to form in layers, and when driven into the foot the horny fibres of which the hoof is composed cause the nail to separate at the point and one portion passes *into* the foot.

No. 4 represents one of these nails which was driven into the hoof, and *slivered* in driving, one *thin* blade passing into the quick or sensitive sole. No. 5, the *thick* blade of the nail, passed out of the wall of the hoof for clinching. After a few days the horse was returned lame, and upon the removal of the shoe, a nail similar to the above was broken off, leaving a sliver in the foot; *lockjaw* ensued, from which the horse died. Upon dissecting the foot a portion of the nail was found to have penetrated through the Coffin bone, as seen in Fig. 2, letter A, thus sacrificing the life of a valuable animal.

It requires but little observation and reflection, one would think, to arrive at the conclusion as to the kind of nails to be used in the horse's foot; whether a mangled piece of iron rendered DANGEROUS by the *Cold-Rolling and Shearing* process, or one made from the rod at a welding heat, where all the fibres remain intact, and a perfect *oneness* is maintained, and which being pointed by the hammer, *every* nail is inspected, rendering such an accident as slivering utterly impossible.

The foot is the *most important* member of the animal's body, to which the greatest care and attention should be directed; for when it becomes injured or diseased, no matter how perfect or sound the other parts may be, the horse's services are diminished or altogether lost. Hence the value of a horse depends upon the condition of his feet. "NO FOOT NO HORSE."

As the remedy lies with the owner of the horse, it is for him to prohibit any cold-rolled or sheared nails being used in his horse's feet. **The only Hot-drawn and Hammer-pointed Horse Shoe Nail in the World** that is *not cut nor clipped, sheared* upon the point, and will not split in driving is the PUTNAM NAIL. See that your horse is shod with this nail and avoid all risks. For sale by all dealers in Horse Nails.

This drawing was made from a nail, showing the lamination of iron in the *Cold-Rolled and Shearing* process.

This drawing was made from the nail taken from the hoof and coffin bone, as shown in Figs. 1 and 2.

We have known several cases in which valuable horses have been badly lamed by the use of *Cold-Rolled and Sheared* horse shoe nails. We have used the same nails and been compelled to banish them from our shop. The Hot Forging process is the only sure manner of making a true driving and safe nail.

REV. W. H. MURRAY, *Golden Rule*, October 31, 1877.

OFFICE OF THE LEDGER, NEW YORK, November 22, 1877.

Messrs Putnam & Co.: GENTS.—I have been using your nails for four or five weeks on all the shoes that we put on my horses, and I have no hesitation in saying that we have never used any nails that gave us so little trouble. I prefer them to any hand-made nail that I have ever seen.

Yours truly,

ROBERT BONNER.

SAN FRANCISCO, Jan. 4, 1878.

The Putnam Nail Co., Boston: GENTLEMEN.—After long usage can safely recommend to all owners of track and light-harness horses your *Hot Forged Horse Shoe Nails*. Yours respectfully,

BUDD DOBLE.

Samples sent free by mail by addressing

PUTNAM NAIL CO.,

P. O. Address, Neponset, Mass.

Boston, Mass.

THE "ORIGINAL" PATENT METALLIC HAIR BRUSH.

NO GENTLEMAN'S OR LADY'S TOILET TABLE COMPLETE WITHOUT ONE.

Any person once using one, would not part with it for many times its cost. The advantage this brush possesses over all other brushes is its efficacy in

CLEANSING THE HEAD FROM DANDRUFF,

which is so destructive to the roots of the hair. BEWARE OF WORTHLESS IMITATIONS. Brushes secured by metallic bands soon corrode, catch in the hair, and become useless.

THE POLAND BRUSH is the original patent. All Genuine Poland Wire Brushes bear stamp, patented July 21, 1874, and trade mark.

Trade Mark.

Registered April 24, 1877.

Manufactured by the
PATENT METALLIC BRUSH CO.,
30 Hanover Street, Boston, Mass.
ARTHUR POLAND, Manager.

NEW AND IMPORTANT INVENTION.

THE PATENT
METALLIC CURRY COMB
AND
Brush Combined.

Thousands of valuable horses are spoiled every year because they will not stand to have their skins torn off with the old style of stiff curry comb, and when the operation is performed the animal is exhausted and unfit for service. To remedy this evil and cruelty we introduce to all owners of horses our

Patent Metallic Curry Comb and Brush Combined.

No other instrument need be used to groom a horse perfectly clean, except a dust brush or cloth to clean off the dust when brought to the surface; twice the work can be done with our comb, in the same time, that can be done with the old method, and the most nervous animal will stand perfectly quiet while the operation is being performed; it will not pull out one hair from the mane or tail, where the old comb or card will one hundred.

MANUFACTURED BY THE

Patent Metallic Brush Company,
30 Hanover St., Boston, Mass.

ARTHUR POLAND, Manager.

We have many certificates from parties using our goods testifying to the above facts, but space does not allow us to give them. We mention Dan Mace, Proprietor of Grand Central Boarding Stable, New York. Thomas O'Connor, Proprietor of the American Club Sale and Boarding Stable. Prof. Wm. Gaines, Veterinary Surgeon, New York. Oliver Warner, Boston, Mass., Secretary of State of Massachusetts. S. P. Wilcox, Detroit, Mich. Henry Clay, Boston, Mass. Fowler Bragg, Bath, Maine. J. E. Hollis, Boston, Mass. Mrs. C. W. Holden, Boston.

JOHN REYNDERS & CO.,

(LATE OF OTTO & REYNDERS,)

No. 303 Fourth Avenue, New York,

MANUFACTURERS AND IMPORTERS OF

VETERINARY INSTRUMENTS AND MODELS Of Every Description.

Our Improved Drenching Horn, for administering medicines etc. to animals perfectly, and without difficulty.

PRICE, \$3.

HORSE SUSPENDING SLINGS

(Without Pulleys and Ropes, which can be had to suit at any Hardware Store).

For Horses of any size,.....\$20.

For Horses of small size,.....\$18.

"Farmer Miles's" Caponizing Instruments, Castrating Ecraseurs, and Knives.

HOUSE'S ADJUSTABLE TOOTH FILE.

No. 1, stiff handle, \$3;

No. 2, jointed handle, \$4.

TOOTH RASP

Of our Manufacture and Warranted.

Plain, stiff handle.....	\$2.50
Plain, jointed handle.....	3.00
Guarded, stiff handle.....	3.50
Guarded, jointed handle.....	4.00

Illustrated Price

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Fairman Rogers

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1878

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