THE FARMER'S FRIEND, THE HORSEMAN'S GUIDE,

AND

HORSEMANSHIP MADE EASY

IN ONE LESSON,

By DR. H. S. RAREY,

COLUMBUS, OHIO.

MONTREAL :

PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.

1868.

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INTRODUCTORY.

IN presenting this work to the public, the author has divested it of all technical terms, and adapted it to the wants of the people. It contains all necessary information for the Breaking and Training of all description of Horses, and a full account and treatment of all the Diseases to which the horse is heir to. The author does not claim that the Receipt laid down in this work will be a cure-all for every disease,—for there are many diseases which are incurable ; but he does claim that, after the experience of thirty years, his course of treatment is as correct as any heretofore offered to the public.

Connected with this work will be given a Specific Remedy for the Foot Rot in Sheep.

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THE FARMER'S FRIEND.

BREAKING AND TRAINING.

In training horses, you must remember that there are certain natural laws that govern them. For instance, it is natural for him to kick whenever he gets badly frightened; it is natural for him to escape from whatever he thinks will do him harm. His faculties of seeing, hearing and smelling have been given him to examine everything new that he is brought in contact with. And so long as you present him with nothing that offends his eyes, nose, or ears, you can then handle him at will, notwithstanding he may be frightened at first, so that in a short time he will not be afraid of anything he is brought in contact with. All of the whipping and spurring of horses for shying, stumbling, &c., is useless and cruel.

If he shys, and you whip him for it, it only adds terror, and makes the object larger than it would otherwise be; give him time to examine it without punishing him. He should never be hit with the whip, under any circumstance, or for anything that he does. As to smelling oil, there is nothing that assists the trainer to tame his horse, unless. It is better to approach a colt with the scent of honey or cinnamon upon your hand than the scent of hogs, for

Horses naturally fear the scent of hogs, and will attempt to escape from it, while they like the scent of honey, cinnamon or salt. To affect a horse with drugs you must give him some preparation of opium, and while he is under the influence of it, you cannot teach him anything more than a man, when he is intoxicated with liquor. Another thing, you must remember to treat him kindly, for where you require obedience from any subject, it is better to have it rendered

from a sense of love than fear. You should be careful not to chafe the lips of your colt or hurt his mouth in any way; if you do he will dislike to have the bridle on. After he is taught to follow you, then put on the harness, putting your lines through the shaft straps along the side, and teach him to yield to the reins; turn short to the right and left, teach him to stand still before he is ever hitched up, you then have

control over him; if he gets frightened, the lines should be used as a telegraph, to let him know what you want him to do. No horse is naturally vicious, but always obeys his trainer as soon as he comprehends what he would have him do; you must be firm with him at the same time, and give him to understand that you are the trainer, and that he is the horse. The best bits to be used to hold a horse to keep his mouth from getting sore is a straight bar-bit

4½ inches long, between the rings; this operates on both sides of the jaw, while the ordinary snaffle forms a clamp and presses the side of the jaw. The curb or bridoon hurts his under jaw so that he will stop before he will give to the rein. To throw a horse, put a rope 12 feet long around his body in a running noose, pass it down to the right fore-foot, through a ring in a spencil, then buckle up the left or near fore-foot, take a firm hold of your rope, give him a shove with your shoulder, at the same time drawing up the right foot which brings him on his knees, hold him steady, and in a few moments he will lie down. Never attempt to hold him still, for the more he scuffles the better.

Take your colt into a tight room or pen, and with a long whip commence snapping at the colt's hind legs, taking care not to hit above the hocks, stopping immediately when the colt turns his head towards you. While his head is towards you, approach him with the left hand extended towards him, holding your whip in the right, ready to snap him as soon as he turns his head from you. In this way you can soon get your hands upon him. As soon as you have done this, be careful to caress him for his obedience, and snap him for his disobedience. In this way he will soon learn that he is safest in your presence with his head towards you, and in a very short time you cannot keep him away from you. Speak kindly and firmly to him, all the time caressing him, calling him by name, and saying "Ho, boy," or "Ho, Dina," or some familiar word that he will soon learn.

If a colt is awkward and careless at first, you must bear with him, remembering that we, too, were awkward when young; allowing him his own way, until by degrees he will come in.

If he is wilful, you must then change your course of treatment, by confining him in such a way that he is powerless for harm until he submits.

If he is disposed to run, use my pole-check on him: if to kick, fasten a rope around his under jaw, pass it through the collar and

attach it to his hind feet. In this way one kick will cure him, as the force of the blow falls on his jaw. If he should be stubborn, lay him down and confine him until you subdue him, without punishing him with the whip.

Colts should be broke without blind-bridles; after they are well broke, then you may put on blinds. Bridles without blinds are the best, unless you want to speed your horse, then it will be necessary to keep him from seeing the whip. Colts should be well handled and taught to give readily to the rein before they are hitched up. If you hitch them up the first thing and they become frightened, then you have no control over them; but if you teach them to start, stop and stand at the word before they are hitched, then you can govern them.

STABLES.

The owners of horses should see that they are comfortably housed, the stables being well ventilated, and lighted; the floors should be of clay; or if you compel your horse to stand upon boards or stone, he should have plenty of saw dust, tan, or straw, so as the bedding will give way whenever he steps, instead of the muscles of the shoulder giving way to the floor, as is the case when he stands upon hard floors—the floor should be highest at the manger, so as to take a portion of the weight from off his front legs—and throw the stomach and larger intestines back, so as they will not press upon his heart and lungs, and interfere with his breathing; besides he lies easier; underground stables or even stables on the first floor are not so good and healthy as stables on the second and third floors—the trouble being to keep them dry and airy—especially in winter. Horses that work hard do best in box stalls without being taxed with the halter.

CRUELTY TO HORSES.

Besides the cruel punishment inflicted upon horses, by the careless and heartless driver, he is subjected to severe punishment in the winter season—by being compelled to take cold frozen bits into his mouth in cold weather, tearing off the skin from the tongue and roof of the mouth, producing a heavy inflammation in the mouth and throat; he gets poor, hide-bound, and the sympathetic nerves of the head take up the inflammation, carries it to the head and eyes, frequently produces blindness and a hundred other diseases. The whip should be used as an instrument of pleasure, instead of torture; and your bits should be wrapped with flannel or leather; so that no iron will come in contact with his mouth, lips or tongue.

SHOEING.

There are very few blacksmiths that ever once think what a complicated piece of machinery the foot of a horse is, and by one careless blow they stop the working of this machine. The majority of smiths, as soon as they pick up a horse's foot, go to work paring the heel, from the fact that it is the most convenient part of the

foot, and thereby destroy the heel and braces of the foot, causing, in many instances, contracted heels. The heels of a horse should be kept well up and the toe down. By lowering the heels you throw the entire weight of your horse upon the back tendon of the legs, and thereby produce lameness from overtaxing a very important set of tendons. By keeping up the heel you throw the weight upon the wall of the foot. In this position you prevent stumbling, clicking, &c.—next the shoer commences to pare away the sole, thins it down until he can feel it spring with his thumb. Ask him why he does this, and he gives you no reasons, except from custom, next comes the bars or braces of the foot, they are smoothed down, next in his ruinous course, comes the frogs of the feet, they are subjected to the same cutting and smoothing process. All the cutting, paring, and smoothing of the soles, bars, or frogs is a decided injury to the Horse as well as to the owner. All the corns in the land is produced by this process of paring. The frogs have been placed in the foot by nature to expand the wall of the foot, and as soon as you commence to cut it, the oily substance commences to leak out; it dries up, becomes hard, losing its oily substance, makes the wall hard and dry, inducing it to crack. The nerves of the feet are very sensitive, and smiths should be very careful not to prick the foot, as it requires quite a time to relieve them. The foot is a very complicated piece of machinery, and if you keep him well shod and his foot in good condition, you can then generally manage the balance. The feet suffer from being kept too dry. Horses that stand on board floors should have their feet wet every day, or there should be a vat five inches deep, five feet long and three wide, filled with water and clay, in which each horse can stand for one hour per week, unless his feet are feverish, then he should be kept in it an hour per day, or until the fever subsides. Another source of injury to horses' feet, is the habit of patronizing cheap blacksmiths. If a man can drive a nail, he then sets up a sign as a farrier or surgeon, when in fact he knows nothing of the anatomy of the

horse's foot, not having spent any time or money in acquiring the necessary information, he can afford to shoe a few shillings cheaper than a well informed man, but the patrons of such cheap shoeing are generally the sufferers. All horse shoers should be well skilled veterinary surgeons, or there should be a skillful surgeon attached to every shop. Another source of poor shoeing and injury, is the loss of the elasticity of the frog, refusing to perform its proper functions; the heel contracts, the foot rolls, and you have a sore horse for ten or twelve months, for it requires this long to relieve a horse's suffering, from being badly shod.

Under the circumstances, the first thing that touches the road or the floor of the stall should be the frog, and the wall of the foot should be kept cut so as not to prevent it from touching at every step; and no man that owns a horse should ever allow a blacksmith to cut the soles, bars, or frogs of his horse's feet. Nature has adapted the frogs to all description of roads, climates and weather, without being pared. So many horses have been ruined by this process of paring, that there are now several establishments in this country that manufacture Indian rubber pads, thinking thereby to supply the wasted frog and the elasticity of the natural foot. The frog is insensible to pressure, and you may place the whole weight of your horse on the frog and he will suffer no inconvenience, as may be seen from shoeing with one of my corn shoes; besides this is the only reliable way to cure contracted feet; by throwing the weight upon the frog, you force them up between the walls; it acts as a wedge, and soon relieves the contracted feet. Smiths should never have their shoes hot when fitting them, as the application of hot iron extracts the oily substance from the hoof. The amount of cruel punishment inflicted on horses by cross-grained blacksmiths, is another source of poor shoeing. As soon as the horse does not stand the smith gets angry, and commences whipping and jerking the animal, which only adds terror to it, so that he soon refuses to go to the shop if he can avoid it; it is natural for horses

to dislike to be shod, because the hammering shocks the nervous system, until he is accustomed to it. He should be taught to stand and his feet well handled at home before he is ever brought to the shop by the owner. You then save the horse pounding, and the smith an immense amount of labour, that he never gets any pay for, for no man ever thinks of paying anything extra for shoeing a bad horse. The wall of the foot should never be rasped above the nail-holes, and as little below the clenches as possible; all the rasping and filing but tends to thin and weaken the wall by cutting the fibres of the foot. The nails should be counter sunk into the shoe so that there will be no chance for the clenches to rise. No horse interferes with the heel or toe, it is always the side of the foot, the habit of turning the inside of the shoe under, that causes a number of horses to interfere, that would not if they were shod straight in the inside. Spread the heels as wide as possible, set the outside a little under, keep the toes full. For clicking horses, raise the heels high, cut the toes short. For speedy cuts, place your toe corks a quarter of an inch to inside of the centre of your shoe; keep the heels wide apart; for corns put on a shoe with a prong, from the main rim, so as to cover the entire frog. Pare the wall lower than the frog so as his entire weight will be thrown on the frog.

FITTING TROTTING AND RUNNING HORSES.

Horses intended for the turf should be fed to high mangers, so as to contract the chest; kept in light, airy stables, and should be

exercised while young. When put to work they should be well cared for. Should have all of their fast work in the forenoon of each day, so as the groom will have time to take care of him; besides, the air is easier to be breathed than in the afternoon. On coming in from fast work he should be well clothed, have plenty of fresh air, give him a warm mash made up of rye meal, wet up with warm sweet milk. There is no treatment so cruel to the horse as to bring him in from fast or hard work and stand him in the stable without anything to eat; or, if he has anything, a mouthful of dry hay. You may water or feed at any time if your water and feed is blood warm. A horse to do well should have his system always equalized.

He should have his legs tightly bandaged with strips of flannel, 4 inches wide, from the foot to the knee. Let them remain until the horse is well groomed, 6 or 8 hours, then remove them. Bathe them with my Wizard Oil; rub well with the naked hand, taking care not to rub the shin bone.

Horses for trotting and running should be well fed and well worked until within 24 or 48 hours of the time of going, then they should be kept quiet without anything to eat and very little to drink, except warm water, peppermint and brandy,—4 oz. of peppermint and 1 pt. good brandy to a pailful of water once per day: what he has to eat should be warm. By this treatment you retain the strength of your horse. Have him empty and he will answer to every call. As soon as his race is over, he should be fed immediately, and by degrees, until he is satisfied. The digestive organs are in better condition to take up the food than when the horse is allowed to cool and stiffen up. His exercise in the afternoon should be a slow walk of 3 hours by the side of his groom. He should have a soft, spongy bed, made of saw dust and out straw.

FEEDING OLD HORSES.

Feeding old horses is a very difficult subject to treat upon, as no two horses require to be fed alike. There are however general rules to be observed. First the kind of work, or the use you intend him for, the season of the year, &c. There is one thing to be observed in feeding all horses,—it is this: They should be fed when warm, the hotter your horse is when he comes in from the plough, the road, the race or hunt, the sooner he should have his grain, for several reasons: 1st, it prevents founder: 2nd, less grain does him more good, for the digestive organ extracts more nutriment from food when he is warm than when he is cold; you give a horse 4 qts. of oats when he is warm and during the time that he is masticating the oats, the glands of the jaws secrete two gallons of saliva, wets them, and when they go into the stomach they are as warm as the blood and facilitates the circulation, fills up a vacuum which would otherwise occur, and prevents colic and other pains in the stomach, by preventing the stomach from contracting too rapidly, besides, the amount of labour required to eat the oats, prevents him from cooling off too suddenly.

(Horses are composed of earth, air, water and heat. These tempered well and his health is complete). Sudden transition is what destroys most horses. In winter all of his hay should be cut and his grain ground; this is the natural condition in which it should go into the stomach and you save him the labour of cutting and grinding. In hot weather he should have his feed dry, free from dirt and dust. He is less liable to scour or purge; in winter he should have plenty of salt, in summer once in two weeks is often enough. He should have a small box or manger, where a nice ball of clay can be kept for him to lick or eat, whenever he likes. Horses require a certain amount of clay and it is as actually necessary for them as their water or oats. The quantity of feed to be given must differ in different horses. If your horse is at work give him 4qts of oats, 3 times per day. If he is doing light harness or saddle give 2qts. If he is idle give $1\frac{1}{2}$ of oats and 1 of wheat bran, with very little hay. Horses for road saddle or racing should have but very little hay, it distends the stomach without giving nourishment to the horse. It is best to feed this class of horses on whatever they will derive the most benefit from, in the smallest quantity, being taken into the stomach. Another thing to be observed is: never give your horse a full feed when you require immediate work or action from him; it is better to give him a full feed after a hard drive, than to give him a hard drive after a full feed. All horses should be liberally fed in winter with carrots, turnips, potatoes, &c., in addition to their usual feed. If you wish to improve his muscles feed him on dry oats. If his wind, feed on rye and barley, ground and wet up. If his flesh, and to fatten him, feed him on corn and oil cake, or corn and flax seed ground together. Warm feed and warm stables are conducive to flesh. Livery horses should be fed every time they come in if it is a dozen times per day. The only reason why livery horses are always poor and hide bound: they are overheated so often, and then left to cool before being fed, they then take cold; get poor and run down; when fed every time they come in they are ready for work at all times.

FEEDING COLTS.

The colt should be taught to eat while it yet nurses the mother, by the time it is weaned it should be able to eat enough to live on. It should be well cared for, the first two years with oats, wheat, bran, carrots, &c. There are very many colts spoiled by starving them the first two years. The idea is that colts should be raised on straw or poor hay, but in fact if there is any period of a colt's, life at which it needs good care and plenty of food it is for the first two years. There has been many a dollar lost by starving colts, you might as well say that you could develop a boy on potatoes.

I would not here be understood to say that colts should be kept very fat; not so, for one extreme is as dangerous as the other; by overloading the limbs you run the risk of spoiling them, by producing Ringbones, Spavin, and Curbs,—about medium condition is preferable.

LUNG FEVER, INFLUENZA, OR TYPHOID
FEVER.

Is an epidemic prevailing in Canada and the United States,—is considered contagious, and generally proves fatal. It however has its causes of production in all countries; some of which I will describe: 1st, Sudden changes from heat to cold; as after a very cold snap of weather it turns suddenly warm; the atmosphere is damp and heavy; the walls of your stables are damp; the miasm and stench which arises from close stables produces a poisonous effluvia, which is absorbed by the horse, and produces some one form of the disease. Again, changing horses from warm comfortable stables to cold damp ones, often produces it. Driving your horse hard, getting him warm, and then leaving him in a current of cold air, or giving him a heavy draught of water when

warm, and allowing him to stand afterwards to chill ; taking him out when he feels well, on the rein, or turning him out in a paddock when he feels fresh, allowing him to take severe and quick exercise under exciting circumstances ; causing undue excitement, affecting the lungs by the rapid respirations. It is frequently caused by sudden fright, holding and compelling horses to remain in close proximity with whatever they think will do them harm ; producing an unnatural amount of heat and

excitement ; overdriving and exhaustion without sufficient food ; too hard driving on a full stomach ; injuries received on the head, back or limbs ; crowding too many horses in small stables without sufficient ventilation ; keeping one diseased horse in a hurd or stable with other horses. It is found to prevail mostly in crowded cities ; seldom attacks horses on the farm, where they have plenty of clean water or pure air ; the damper your stable, the more

liable your horse is to have some form of the disease. It frequently attacks other parts of the horse.

SYMPTOMS.—The horse breaks out in a cold clammy sweat, accompanied with a severe chill. As soon as the chill is off, his ears, legs, and head become deathly cold, hangs his head down between his legs, or rests it on the manger; nibbles a little at his hay, refusing to eat any quantity; stands perfectly still, never moving unless compelled; he then complains, is exceedingly stiff, appearing very weak; quick weak pulse, hot mouth, shivering, dullness, watery eyes, accompanied by watery discharge from the nostrils, which soon becomes purulent; sore throat, difficulty of swallowing; appetite lost, bowels costive; never lying down; invariably dying upon his feet. In some cases the chest fills with water; the heart and its coverings are severely involved; the eyelids and the head are distended with fluids. It occurs generally in spring and fall; but may occur at any season of the year. It has been often mistaken for ordinary founder. Horses generally live from eight to fifteen days; but if they are not relieved during the first three or four days their case is hopeless. Running, trotting, livery, and fancy horses, are the most liable to take lung fever. The celebrated Canadian trotting horse, St. Lawrence, died at Kalamazoo, Mich., in 1860, from lung fever, produced from cooling off too suddenly after his race. The American trotting horse, George M. Patchin, died from the same cause; Royal George died at Buffalo in 1867 from the same cause; the Maid of Orleans died from the same cause, after running her four-mile race. Livery horses are subject to it, because they are so often overheated, and left standing in the cold by careless drivers. Fancy horses that are kept in warm stables with two or three heavy blankets on, when brought in contact with the air, chill very soon unless kept in rapid motion. I have my doubts as to whether clothes on horses in the stable do them good or not. If he was kept in a good stable, and then had his clothes on when-

ever he was brought out into the air, he would do better. Never expose your horse to sudden changes; they affect his general health and spirits. Horses that are regularly fed and work seldom ever need any medicine. All horses should have plenty of exercise in the open air. Colts should never be housed up or confined; nature intended they should have a certain amount of exercise to develop their muscles and lungs to keep them in condition. This is why wild horses excel tame ones; they commence to run from the time they are foaled, so as by the time they are four years old they are well developed. Colts should be handled from the time they are six months old.

TREATMENT.—If you discover the first attack, and while the chill is on, you must then take 1 gallon of blood from the neck vein quick. The severe chill has congealed the blood, and it refuses to pass through its natural channels, by taking a small quantity of blood you reduce the pulse, but if the chill has passed off and his ears and legs are cold, you must then change your mode of treatment, by warming him up and stimulating him, as depletion has now set in. This may be done by giving him 1 pint red pepper tea, 1 pint good brandy, 2 drachms camphor, 2 drachms nitrate potash, dissolve 1 oz. carbonate of ammonia in 1 pint of warm whiskey, divide it into 4 doses, give 1 dose every 4 hours, in one pint good whiskey and 1 pint warm water, give one quart good beer at intervals of 5 hours, for 3 or 4 days. Blister severely his sides just behind his forelegs, with 2 oz. green flies, 2 oz. turpentine, 2 oz. napher or common rock oil, made into a paste by adding hogs lard and beeswax; blister his throat slightly, or bathe it well with equal parts of hartshorn, sulphuric ether, coal oil, and turpentine. Bathe his legs with the same liniment, adding a heavy proportion of sweet oil to keep from blistering, wrap his legs well from the hoof to the body, first in flannel then with a rope made of straw or hay. Keep him standing in warm water to the top of his hoofs, taking care to keep his feet warm. Have his head,

neck, and ears well rubbed with the hand or dry cloths, so as to keep up the circulation. Put a good large rowel between the forelegs, made of twine, wet with tincture of green flies, turpentine and hartshorn, produce all the inflammation you can for 4 or 5 days, in this immediate vicinity. Give him once per day a drench of 2 drachms nitrate of potash, $1\frac{1}{2}$ oz. sweet spirits of nitre, $\frac{1}{2}$ pint honey in a quart of soft water, under all circumstances he must be kept in the open air; if it be cold weather clothe him warmly, wrap his legs, cover his head and neck, and leave him out of doors, as he must have plenty of fresh air; hundreds of horses are destroyed by housing them up in air tight stables, thinking thereby to do the horse a kindness, when in fact, it is a decided disadvantage. If it is warm weather he will need but little clothes, but all the fresh air he can get, without being exposed to a current, he should have a drink of cold water every three or four hours with $\frac{1}{2}$ oz. of sweet spirits of nitre in it, if he refuses to drink, give him the water and pour the nitre on his tongue, give him 1 drachm tartar emetic 4 times per day, by placing it on his tongue after it is dissolved. His bowels must be kept open, with 1 pint linseed oil and 2 drachms of calomel, taking care not to physic him too much. After he commences to improve, he may have a little slow exercise in the yard by the side of the groom, feed him upon whatever he likes or will eat, he will not be inclined to eat much, for the first three or four days—green food, bran mash, boiled oats, barley or carrots. Injections of soap and water with a little castor oil added is beneficial. Groom him well, rub his body with the hand or dry cloths, spare no pains in consulting his comfort and ease, and in a few days he will recover and repay you for your trouble and kindness.

FOUNDER.

Founder is produced by the sudden transition from heat to cold. For instance, driving a horse until he is hot, then leaving him to stand in a cold current of air, or giving him a heavy draught of cold water while warm, thereby checking the circulation of the blood to the extremities. It is frequently produced by driving fast on hard roads, which produces inflammation of the little plates by which the hoof is attached to the sensitive foot. It also occurs from overloading the stomach by too much wheat, oats, barley or peas, as is often seen when a horse gets loose during the night getting to the oat bin, the food, taken into the stomach in such large quantities, and a portion of it dry, when wet by the stomach, swells to such an extent that it prevents the blood from circulating, and produces founder. No horse will be foundered from giving him his ordinary amount of feed at any time, especially when warm. Symptoms. It sets in with shivering and uneasiness; he refuses his food, moves about with the fore-feet, and seems restless; the mouth is hot, the pulse full and quickened; soon the pain in the feet becomes evident, he sometimes inclines to lie, points with the muzzle to the feet, which are found hot and tender, he advances them in front, resting principally on the heels, while the hind feet are well drawn under him; on backing him he backs with evident reluctance, when forced back, he drags one foot after the other, evincing considerable pain in doing so. When moved forward he walks on the heels, his movements being slow and difficult. The bowels are costive and fever runs high.

TREATMENT.—Copious bleeding is indispensable, say 6 or 8 qrts. taken from the neck vein, and 2 or 3 from the plate veins of the legs. Turn up his feet, fill the feet with spirits of turpentine, set it on fire, and let it burn until the foot is well warmed; make a rope of hay or straw, and wrap his legs from the hoof to the body. To steam well with warm water, give one ounce aloes, dissolved in one pint.

linseed oil, give green feed or bran mashes, compel him to take a little slow exercise; after he has somewhat recovered, stand in a vat or mud hole, 5 inches deep, so as to soften his feet. If he is bare-footed put on a thick heavy pair of shoes. Iron is a good conductor of heat, and thereby keeps the foot cool.

BOTS.

Bots are one of the natural institutions of a horse, as much so as his lungs, arteries, or any other essential, and never injures a horse.

They have been placed in the stomach of all horses by nature, for a specific purpose, and no horse can live without them in the stomach. They are in the stomach of all horses at the time of foaling, they never have more or less at any age, they never let go their hold of the lining of the stomach under any circumstance. The heart was given him to propel the blood; the lungs to breathe; the eye to see; the ear to hear; and the bots to cut up, grind and prepare the food when it goes into the stomach for the digestive organs, so you see the life and health of your horse is dependent upon the bots. The horses getting sick, makes the bots sick; any description of food good for the horse is good for the bots. They never injure a horse except when they become diseased, the same as any other vital part; if your horse is overheated or exhausted from work, and is attacked with colic or any description of inflammation, the bots suffer equally with the horse; anything you give the horse to kill the bots; will kill the horse also. When you keep your horse in good condition, well and regularly fed there is no danger. Bots have been used heretofore to cover up the ignorance of the farrier. If your horse dies of inflammation of the brain, they would say he died of bots; if he dies of lung fever, the same thing is said; if he dies of colic or anything else,

it is always attributed to the bots, when in fact no horse ever died directly from their effects. The quid has been given to the sheep and cow, so as they may belch up their food and re-chew it, thereby preparing it for the digestive organs while the bots have been given to the horse to perform the same work for him, without taxing him with the labour of re-chewing ; besides, his owner might require some hard or fast work of him, just at the time when he might be re-chewing his food. The gad-fly has nothing to do with the production of the bot, no more than the horse-fly, buffalo-knat, or any other fly ; all the harm they do is the tickling and buzzing sensation that they produce in the peculiar ticklish portion of the horse that they visit ; the wasp, hornet and other insects torment horses, yet there are no bots ever attributed to any of them ; you can punish a horse as much with a fine straw or a piece of paper twisted to a point, by tickling him under the throat ; in the flank, or upon the legs, as much as the gad-fly does, or by catching a fly and holding it close to his ear, while it makes a buzzing noise, all of which he attempts to escape from, as much as the presence of the gad-fly. It is impossible for him to lick or bite the nits from off his legs, belly, or throat, without pulling the hair off, and as no horse ever swallows any hair it is impossible for them to be carried into the stomach ; besides there are thousands of horses in warm climates, and in stables that never see any gad-flies, yet all horses have bots. All that has been written in connection with the gad-flies producing bots, and all of the technical terms used to illustrate them and their effects, have been to fill works upon the horse bots as a disease in horses, is fast passing away, like that of the Lampas and many other old fashioned notions.

COLIC.

Colic is produced by forcing the horse to too much exercise when the stomach is too full, and by over-heating him, or allowing him too

much water or accumulating too much gas, by means of which you produce pain in the stomach. He should be warmed up with whiskey and red pepper tea, give him 2 ounces of laudanum in one quart. linseed oil; make him take a little slow exercise; do not allow him to roll or pound himself on the ground. Rub him with a smooth pole, from the fore-legs backwards, with a man holding each end; this keeps the muscles of the abdomen in action.

LAMPAS.

I here have to combat with an old established opinion, that lampas is a disease in horses; but thirty years' experience has taught me that there is no such disease in existence.

The gums of all young horses are swollen below the teeth, as nature intended they should be, and all of the rubbing attributed to lampas is the effect of poor feed and poorer care. You never find a horse of 5 years old with lampas; at this age the gums recede above the teeth, and continue to do so as they grow older.

The practice of burning colts for the lampas is a severe and savage practice, destroying the roof of the mouth, and the power of retaining the food until it can be masticated.

The hard gristly bars in the roof of all colts' mouths, have been placed there by nature for specific purposes; 1st it is insensible to the touch, and with this hard bar he picks his grass and grinds his food while his teeth are tender and being shed; 2nd the largest artery in the horse terminates in the roof of the mouth, and those bars have been placed there to protect it from rupture. To relieve him give him plenty of oats and bran well wet up; give him plenty of carrots, turnips; or potatoes, plenty nice clover hay, clean water, fresh air, a good bed, and you will never be troubled with lampas, you had as well burn off his left ear, or burn his left eye, then he would have the right ear to hear with, and the right eye to see with; but when

you burn out his mouth, he has nothing to supply it with, and you disable him.

HEAVES

Are produced by driving or drawing your horse against a heavy current of air, thereby inhaling more air than the lungs will discharge; in this overcharged condition they become ruptured, and when once ruptured can never be cured. He had better have his food well wet so as that he will inhale no dust while eating, as it is the dust that does him harm, instead of the peculiar hay; it is worse to confine him in the dust of a threshing machine for one day, than to feed him with clover hay for a month.

GLANDERS.

Glanders is an affection of the glands of the head, and may be known by a flow of white matter from one or both nostrils, accompanied by an offensive smell; it may be told from common distemper, as the secretions from distemper will float on water, while that from glanders will sink immediately. It cannot be cured; but may be relieved, and is not contagious.

BLIND STAGGERS

Is caused by some injury to the head. General inflammation, over work, high condition—standing in the hot sun, and getting overheated. It may be known by the wild and drowsy appearance of the horse, stands with his head down—leaning against the manger or the sides of the stable—the pulse full, soft and slow; breathing with difficulty; when aroused takes a few bites of hay but soon drops to sleep again, the bowels are costive—the urine high coloured, he staggers, falls, breaks everything he comes in

contact with—throws himself violently down—lies trembling, blowing and convulsed—his blood-shot eyes seeming to start out of their sockets. To relieve him : Bleed him from 2 to 2½ gallons quickly from the neck vein, confine him so as he will do no harm, immerse him immediately in cold water—apply a cake of ice to the top of his head and neck—place his head and neck under a shower bath ; his bowels must be opened with 10 drachms of Barbadoes Aloes, ½ oz. carbonate of soda, 1 pint Linseed Oil given in a drench. After he has commenced to improve, he must be fed sparingly ; with green food, bran mashies or carrots ; keep him in the shade for a few days—be careful not to increase his flesh too fast and he will soon be well.

LOCK JAW

Is produced from some injury received by the nervous system, injury to the spinal column, a rap on the top of the head, a nail driven into the quick by the blacksmith, or one picked up upon the road. Symptoms, he stretches himself at full length, hangs his head down, stiff all over, his jaws immovably fixed. Treatment, bleed freely, open his bowels with a drench, 10 drachms of aloes, 3 drachms of calomel, in one pint of linseed oil. Keep him in a comfortable box, feed him on whatever he can eat, bran mashies, boiled oats, or if he is very bad give him a sloppy drink of oatmeal, rye-meal or linseed meal, whichever he can take.

GELDING.

From thirty years' experience with horses, I have come to the conclusion that no horse should be castrated : it disables him and destroys a certain portion of vitality. No gelding can endure so much hardship on as little food as stallions and mares, because the

stallion and mare are in their natural state, while the gelding has been submitted to an artificial operation, which has a tendency to weaken him. But if you make up your mind to geld your colt, much of the pain and punishment produced by firing irons and poisonous clamps may be obviated by the operation being performed with a good waxed-end being securely tied around the artery. The objection to firing irons is, the burning produces more inflammation than the gelding does; besides, the artery is liable to separate, and commence bleeding at any time. The clamps are objectionable from the amount of poisonous caustic used upon the arteries. In many cases the poison has been transmitted to the system, and death insured from the cause. The artery is as liable to bleed when you take off your clamps as when the operation is first performed. The sole object of the firing and clamps is simply to stop the blood: this is much more effectually done with a secure ligature. The most of the punishment produced from gelding is by burning or smashing the spermatic cord, which is needless, from the fact that it emits no blood, while it is exceedingly sensitive to the iron, or when mashed in the clamps. As soon as the testicle is taken out, the spermatic cord should be clipped loose, and let go into its natural place, without any burning or mashing; then with your string secure the artery, one or one and a half inch from the testicle; turn your horse loose, and the string will come off by the time your horse gets well, and you will have no further trouble with him. The string should be left eight or ten inches long, so as the ends will hang out of the incision, and act as conductors to carry the blood and matter out, which always produces swelling and inflammation. If he swells, make an incision in the extreme lower end of his sheath, one inch long, and by gently pressing with the hand, the blood, matter, and water, soon find their way out, and the swelling subsides. The sheath should be kept wet with cold water, buttermilk, hogs-lard, or some preparation that will keep it moist. He should not

be housed, except from cold, storms, rain, or snow. The age at which colts should be gelded is when they are from five to ten days old. At this age the arteries and cords are not so hard, and you need no firing irons, clamps, or strings. The operation may be performed the same as upon lambs. The younger you geld any description of stock the larger and finer they grow. The idea of allowing colts to run until they are two or three years old, is simply a notion; for the older they are the more they suffer from the operation, and less likely to make nice geldings. The best season to perform the operation on yearlings and older ones is in the fall, or early part of the winter, say from October to the 25th December: sucklings may be altered at any season. Yearlings and older colts should never be gelded in the spring, as at this season they are poor, weak, ewe-necked, and unable to bear the shock produced by the operation, and besides it would take all one summer for the colt to recover; but in the fall he is fat, full of life, good shape, and is much better prepared to undergo the change than in spring. Colts retain their shape much better if gelded when fat.

TREATMENT AFTER THE OPERATION.—Turn him out, if young, and let him take all the exercise he wants; if old, put him to light work, or have him take three or four hours exercise a day by the side of the groom, and in a few days he will be well. The operation should be performed by one man alone, from beginning to end. The throwing and tying may be done by one man, by putting a rope twelve feet long around the body in a running noose, pass it down to the right foot through a ring attached by a strap, then buckle up the left fore-foot, taking firm hold of your rope, with the right-hand close down to the right-foot, taking the bridle-rein in the left, to prevent him from plunging forward; give him a shove from you with the shoulder, at the same time drawing up his right-foot, which brings him upon his knees, turn his head to the right side, and in a few moments he will lie down. Have a rope double with a ring in it, which forms a collar for the

neck, allowing the ring to come between the front legs. The ends of your rope must be eight feet long from the ring, then buckle a good strong strap around each hind foot, pass the rope back to the under hind foot, then through the ring; draw the foot up to it, secure it tightly by tying; then by the same process bring up the other one; then undo the first rope from around his body, passing it round his hind feet, just above the hoof; draw it tightly, which brings his hind feet close to his body, taking care to secure it with a good knot, which prevents him from struggling, and takes the strain from off the small of the back. Many horses are spoiled by being thrown down backwards.

NICKING, PRICKING, AND DOCKING,

Used to be practised to give horses a fine appearance for the devotees of fashion, but now it is only resorted to as a necessity. There are a great many horses that switch the tail and catch the line and then kick, others commence to kick as soon as the tail commences to switch: with both of this class of horses, there is no alternative except to nick and prick them. Others carry the tail so low, that they look badly; these may be pricked and set up without being docked, which improves their looks very much. The operation is best performed by laying your horse down and securing—the same as if you intended to geld him; cut one side of the tail with the right hand, and then turn him over and cut the other side with the same hand; few men can cut with the left hand and make a good job of it, as both sides must be cut even and alike. In taking the tail off, care should be taken to cut the skin so as to form a flap or covering for the end of the bone; no chisel or shears should be used to cut the tail off with. After you have parted the skin, you should then find the joint nearest to the length you want it, and with an ordi-

nary pocket knife unjoint the tail, without cutting and mashing the bone. In this way you produce little pain, and the tail gets well in a few days. The tail should be cut and pulleyed before it is taken off, as you can then pulley it by the hair that you take off, whereas if you cut at the same time, you pull off a good deal of the hair that you need in the tail. It should be pulleyed but very little after it is taken off. It should not be taken down or out of the pulleys for three weeks, or until the cuts are healed up, so as to prevent the adhesion of the muscles in the same position. If you want your horse to run to grass, put a dumb jockey on him; tie his tail up to the prongs, and let him run until you want to take it off. Keep the tail and hair well oiled with sweet-oil or hogs-lard.

LICE.

Lice generally manages to afflict colts in the spring of the year, when they are least wanted; they reduce colts very fast, and afflict their general health. All of the rubbing attributed to the lampas heretofore is the effect of lice. They may be destroyed in four or five days by applying a paste of sulphur, coal oil, and lard. Take 3 lbs. lard, 1 lb. sulphur, and half pint coal oil; mix well together; melt the lard, and then stir the sulphur and oil in. Let it stand until it cools; then run the ointment along under the mane, down the back to the root of the tail; put a little on the flank and sides, behind the fore-legs; let them out in the sun after you have put on the ointment.

GOLD-DUST, a Thorough-bred American Merino Ram, 5 years old, owned by Messrs. EDWARD HAMOND & SON, Middle-

HABITS OF SHEEP.

Sheep form habits which are difficult and not safe to change. Those accustomed to good hay will thrive on it. Those fed on grain from year to year will languish without it. Sheep taught to eat straw, even ripe wheat straw, from the time they are lambs, will continue to eat a portion of it every day, though plentifully supplied with good hay. And we have seen thrifty flocks of nice ewes wintered on wheat straw and two gills of corn each, per day, until the 1st of March. Sheep brought up on hay exclusively can scarcely be starved to eat ripe straw freely, and will drop off in condition and strength rapidly if confined to it, with the above allowance of corn. A highly fed, and summer housed sheep, if compelled to rough it in the common farmer's way, will soon pine away and perish. A sheep that has always roughed it, if suddenly pampered, will also find the change fatal. A multitude of similar examples might be given, and they all go to prove two things: 1st, that violent changes in the habits of sheep should be avoided; and 2nd, that in judging what is best for sheep we must not attempt to judge all things by the narrow grooves in which our own individual experience may have run. No domestic animal is so entirely governed by the force of habits, as the sheep.

The foot rot in sheep is produced by keeping them crowded together in wet filthy pens, or running on low wet pastures, and may be known by the sheep going very lame; he soon loses his flesh, and unless attended to, soon dies; this disease is peculiar to the fine bred merino, and is considered contagious. It may be relieved in a short time by keeping the sheep's feet dry, and applying equal portions of caustic potash and butter of antimony, or washed with a strong solution of blue vitriol. It is about the same as scratches in horses or foul feet in cattle.

ROSEY,

A beautiful Thorough-bred Ayrshire Cow, 5 years old, belonging to Mr. C. H. ROBIE, Savannah, Steuben Co., New York.

JANE,

A beautiful imported Thorough-bred Ayrshire Cow, 8 years old, belonging to Mr. ALEXANDER CRAWFORD, Petite Côte, Montreal.

CATTLE.

Cattle are different from horses, needing but little extra attention or doctoring, if care is taken to feed them regularly. Keep them dry and warm and little else is required : they should have plenty of soft food, good hay, clean water and fresh air. For dairy purposes they should not be kept too fat—they should have plenty of sunshine both summer and winter : it is as actually necessary as their food ; they should not be crowded too thick together, their stables should be well ventilated and drained—those intended for beef should be kept quiet and comfortable, and much is gained by giving each one a nice dry box stall so that he will be more comfortable than when hitched to the post ; for good milkers they must be treated kindly, remembering that the milk-maid will be in a good humour whenever she comes ; many cows are spoiled, and much milk and time lost by cows being beaten and abused by those who have charge of

them—dry food is not good for cattle of any description—all their food should be cut, ground and wet up—much is lost in cold climates by turning cattle to pasture too soon—the nibble of green grass that they get, spoils them from eating their hay, while what little grass they do get, does them no good—they should be kept in doors, or in the lot until the grass gets up, so that they can live without being fed. Cattle should be in good order by the first of November, for it is better to commence a hard winter with a good coat of flesh, than to have them poor at the beginning of winter—if you have roots enough to improve their flesh during winter, and turn them out to grass in the spring in good condition, you will see a material change by the Fall. It pays best to keep all your stock in good condition.

RECIPES.

RAREY'S LINIMENT FOR MAN OR BEAST.

For Burns, Bruises, Rheumatism, Inflammation, Swelling, Sprains, Headache, Toothache, Chapped Hands, Spavins, Ringbones, Splints, Sweeney, and 1000 other diseases. Take four ounces sulphuric ether, four ounces hartshorn, four ounces oil organum, four ounces alcohol, four ounces sweet oil. Shake well before using. For Sprains, use a tight flannel bandage four inches wide. For Headache, rub a little on temples, and apply a piece of brown paper, wet with the liniment, to the forehead. For Toothache, fill the tooth with cotton, wet with the liniment.

SORE TONGUE.

May be cured by washing well with strong alum water.

CONDITION POWDERS.

Take half lb. sulphur, four ounces crude antimony, four ounces ground Fendergreek seed, four ounces ground ginger, two ounces rosin, well mixed; give him three tablespoonfuls per week, in a bran mash.

WIZARD OIL.

Take six ounces oil organum, six ounces alcohol, one ounce spirits turpentine, one ounce camphor. Shake well before using.

HOOF-BOUND

Is produced from the feet being kept too dry, thereby producing fever in the feet, often from founder. Spread the heel with my Hoof-Bound Shoe, let the horse run out, anoint his feet with one pint linseed oil, one pound lard, one pint tar, for the wall of the hoof, keep the inside oiled with lard or tallow; use this for five or six months and you will have a nice hoof. All horses' feet should be kept moist; the ointment should be put on at night, so that the horse need lose no time from his work.

LIQUID BLISTER.

Take 1 pint alcohol, $\frac{1}{2}$ pint turpentine, 4 oz. ammonia, 4 oz. oil organum, 1 oz. naphtha: apply this with sponge every 3 hours until you feel the skin thicken.

BLISTERING PASTE.

Take 4 oz. pulverized cantharides, 2 oz. turpentine, 2 oz. English rosin, 2 oz. bees-wax; melt all together over a slow fire until dissolved; rub it on well with the fingers.

BLISTER FOR RINGBONE AND SPAVINS.

Take cantharides 2 oz., mercurial ointment 4 oz., tincture of iodine 3 oz., turpentine 4 oz., corrosive sublimate 3 drachms; mix all well with one pound of lard. After it has blistered well, dress it well with our Calomel Salve.

SORE THROAT.

Symptoms: the horse hangs his head down, chews, but cannot swallow; throat swelled and feverish. Bathe well with my Wizard Oil. Apply a poultice of wheat bran wet up with a strong decoction of red oak bark. Give him warm water to drink, with moderate exercise. If he is feverish, bleed him 2 gallons from the neck.

DISTEMPER.

Is nothing more nor less than a bad cold. As soon as you discover that your horse has distemper bleed him 2 or 3 gallons from the neck. Give him a quart of good whisky per day. Poultice the neck with wheat bran. Give him a tablespoonful of assafoedita dissolved in alcohol. Give him plenty of gentle exercise.

Smoke him well with tar, feathers and old leather, burnt in a tin pan, held to his nose, allowing him to inhale the smoke.

THRUSH, GREASE HEELS AND SCRATCHES

Are all produced by over heating, standing still in filthy stables. These diseases may be known by a discharge of matter from the frogs and around the tops of the feet. Bleed and physic, poultice with wheat bran and red oak bark, keep the parts clean, and anoint them with a salve made of two ounces lard, two ounces tar, two ounces blue vitriol, two ounces calomel, well mixed together; keep the horse in a clean stable or dry pasture.

CALOMEL OINTMENT.

For Fresh Wounds, Old Ulcers, &c., take 4 oz. calomel, 1 oz. turpentine, 2 oz. mutton tallow; melt all together over a slow fire, make a paste, and apply it upon soft cloth, keeping the sore well cleansed with castile soap.

FISTULA AND POLL EVIL.

These sores are produced on the shoulder and poll of the head, by a bruise on the muscles, causing swelling and fever. The enlargement may be reduced and scattered by blistering, roweling and using my Wizard Oil. After it breaks, the pipes must be eat out with caustic potash; after the potash has been on forty-eight hours dress the sore with four ounces spirits turpentine, four ounces tallow, and two ounces calomel, well mixed together; the potash and ointment should be applied every two or three days; keep the parts affected clean with soap and water.

WEAK OR INFLAMED EYES.

Make an incision in the small vein on the side of the face, five inches below the eye, so as to bleed freely, rowel below the eye on the jaw bone, apply a blister just back of the eyes, wash well with cold water three times per day, dissolve 18 grains sulphate zinc, ten grains sugar of lead in six ounces of soft water, and with a small glass syringe apply the wash once per day—if this does not relieve in five or six days, bleed two gallons from the neck vein, give him a physic ball, grass, and bran mashes.

TO REMOVE WARTS.

Pare the old skin until the wart bleeds, then apply a little caustic potash, which will kill the roots immediately. Oil well next day.

PHYSIC BALL.

1½ oz. aloes, 3 drachms of gamboge, 20 drops oil of juniper, make it into a pill with 30 drops molasses, wrap it up in thin paper and grease it; draw out his tongue with the left hand, place the gag in the mouth and run the pill back with the right hand until it drops off; let the head down and give a sup of water. First prepare the horse by giving one or two mashes.

STIFF SHOULDER OR SWEENEY.

Caused by a strain or fast driving down hill, the shoulder sinks away and the horse becomes stiff. Rowel on the shoulder and breast with a dull needle, tearing the skin loose from the bone; use for a season a plaited twine, wet with my Wizard Oil, move the rowel once per day, let it remain two weeks; if the sweeney is on the underside, rowel over both lobes of the breast so as to draw the inflammation from next the body.

SPRAINS IN THE STIFLE.

SYMPTOMS.—The horse holds up his foot, moans when moved, swells in stifle; this is what is called stifling. There is no such thing as this joint getting out of place. It gets sprained the same as any other joint and the patellar may slip from its place which acts as a stay to the joint. The tendons and ligaments become contracted, and lameness follows. To relieve it, foment the joint well, stimulate it with some strong liniment or a slight blister.

All the remedies and prescriptions in this work for horses, cattle and sheep, may be obtained at any drug store, prepared and administered by any one.